The American Artisan

THE HARDWARE RECORD

Volume 44—No. 17. CHICAGO, OCTOBER 25, 1902. $2.00 Per Year.

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Columbus Bolt Works,

Columbus, O.

Bolts, Nuts, Washers, Turn Buckles, Bridge and Roof Rods and **Bolts**

ALL KINDS OF CARRIAGE FORGINGS ON APPLICATION CATALOGUE

PURE "SAMPSON" ASPHALT BRAND" ROOFING

Never Dries Out or Cracks. Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc. WRITE US FOR PRICES.

J. L. PERKINS & CO., 235 Lake St., CHICAGO

AMERICAN SEAL STOVE PUTTY

Odorless—Never Cracks—Never Crumbles—Never Falls out. Makes tight joints, and prevents the escape of gas or ashes.

ASBESTOS FURNACE CEMENT

Bakes hard as the iron itself—Strictly Fireproof—Perfect Non-conductor

Try a sample order of either of the above and be convinced of their superiority. If you are not satisfied return the goods at our expense. Put up in any size package from a pound can to an 800 pound barrel.

Insist on having AMERICAN SEAL. Every package bears above trade mark

Manufactured by

THE WM. CONNORS PAINT MFG. CO.
TROY, N. Y.

Western Agents: J. L. PERKINS & CO., 235 LAKE St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

Nicholson File Co.

GENERAL OFFICES: PROVIDENCE, R. I., U.S.A.

Manufacturers of

FILES and RASPS

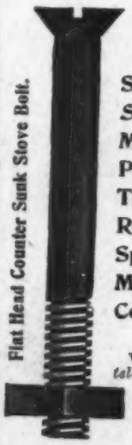
NICHOLSON, ARCADE, GREAT WESTERN, EAGLE, "X. F."
KEARNEY & FOOT, AMERICAN, McCLELLAN, J. B. SMITH, GOLD MEDAL.

INDEPENDENT STOVE PIPE RADIATORS.

Don't Buy Radiators Without Learning About the INDEPENDENT for 1902.

INDEPENDENT REGISTER CO.
CLEVELAND, O.

THE ATLAS BOLT & SCREW CO.
CLEVELAND, OHIO



have unsurpassed facilities for the manufacture of

Stove Bolts,
Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets,
Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

We have a large *clientele* among stove men who appreciate our high quality, prompt deliveries and attractive prices. Let us hear from you.

BRADLEY SHELF BRACKETS.

Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

E. J. JOHNSON & CO.,
38 PARK ROW, NEW YORK,
Producers of
ROOFING SLATE
Slate Blackboards. Write for delivered prices.

Black Diamond Files and Rasps.

PERFECT—ALWAYS

Twelve Medals Awarded

At International Expositions.

G. & H. BARNETT CO.,
Black Diamond File Works, PHILADELPHIA, PA.

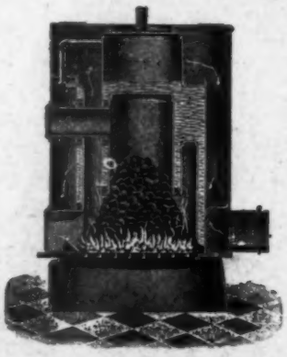
"To discontinue your advertisement," says Ex-Postmaster-General John Wanamaker, one of the largest advertisers in the world—and naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business, you must let the people know it. I would as soon think of doing business without clerks as without advertising"

BOILERS AND RADIATORS

A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

AMERICAN RADIATOR COMPANY
Lake and Dearborn Sts., CHICAGO.



"Defender" (Steel) Boiler

For Steam and Hot Water Heating Surface Burner. For Soft and Hard Coal. Portable and Brickset.

Kewanee Boiler Company, Kewanee, Ill.
167 E. LAKE ST., CHICAGO.

THE SCARCITY OF COAL

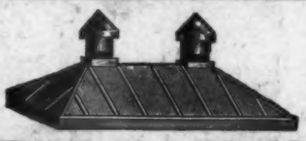
makes the householder's heating problem doubly hard to solve this season. We want to have you send to us and let us tell you how

The "Columbia"

OUR NEW PORTABLE BOILER

Actually Will Save One-Quarter of Your Fuel Bill, while giving you the most perfect comfort you have ever enjoyed. This boiler has been thoroughly tested and found to be perfect in every respect.

VANCE BOILER WORKS, Geneva, N. Y.
JOHN S. KANE, 91 DEARBORN STREET, CHICAGO.



"THE ILLINOIS"

METALLIC SKYLIGHTS

Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free. We are prepared to furnish ribbed skylight glass at very reasonable prices.

J. H. JONES, Mfr.,
Lock Box 33. STREATOR, ILL.

MAYER & COMPANY

The Champion Hot Water Combination Heaters

They Fit Any Furnace

Base section when used without ring sections.

Ring Section

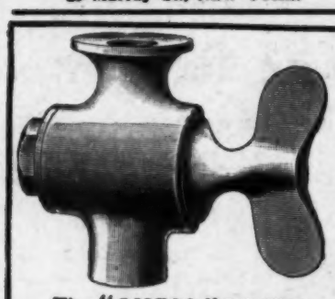
These Heaters are made in five sizes diameter, and from 100 to 700 square feet radiation capacity.
Will heat those cold rooms or an addition to the building. Will increase the capacity of any furnace. Are cheaper than coils and will do more work.
Write for new circular. Manufactured by

FRANK D. STOLZ
115 Lake Street CHICAGO, ILL.

"Eagle" Brand Copper Rivets and Burrs.

STANDARD FOR QUALITY. (Lake Superior Copper.)
—MANUFACTURED BY—

THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.



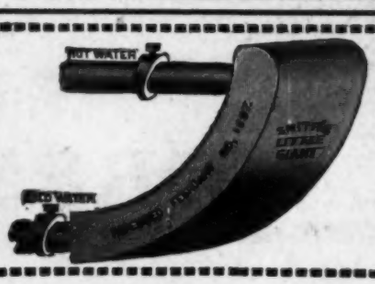
The "OMEGA," 2-3 Size.
To attach to bottom of can.

BEER,
MILK CAN,
OIL CAN,
CREAM SEPARATOR

FAUCETS.

Various Sizes and Styles.
MANUFACTURED BY
CLARK NOVELTY CO.,
ROCHESTER, N. Y.
Also Mfrs. of The CLARK Kerosene Oil System for Heating Soldering Coppers.

J. R. West, Gas City, Ind., writes: "Please discontinue ad. for Tinner, as I am overwhelmed with applicants, and have had a man at work some time."



SMITH'S

LITTLE GIANT
CIRCULAR GIANT
MALTESE GIANT

Can be used in any furnace and will heat your cold rooms.

THEY HAVE NO JOINTS

...Send for Catalogue...

CHARLES SMITH COMPANY
122 LAKE STREET, CHICAGO

The Hard Coal Strike Is Over

and there will be a greatly increased demand for

BASE BURNING STOVES

We offer the trade an unusually attractive line of

BASE BURNERS

OUR 1905 CATALOGUE is just out WHY not send for a copy?

MARVEL Gold Coin Ventiduct Base Burner...

FOR HARD COAL

Is a splendid medium priced Base Burner, which embodies all the essential features of our higher grades and is a pleasing design, richly ornamented with full nickel domes, swing cover, name plate, side rails and base and spun brass urn.

IDEAL Gold Coin Ventiduct Base Burner...

FOR HARD COAL

Is a stove of handsome proportions highly finished, full nickeled, a double heater at a price which is bound to make it a big seller.

The Original Gold Coin Ventiduct Base Burner

In Its New 20th Century Dress

FOR HARD COAL

Is a beautiful and original design, which surpasses anything yet produced in the stovemaker's art, and EXCELS IN POWERFUL RADIATION AND ECONOMY OF FUEL.

The Original Gold Coin Ventiduct Base Burner

In Its New 20th Century Dress

FOR HARD COAL

Has bold nickeled trimmings, which have a mirror finish and are ventilated so as not to tarnish.

EVERY STOVE IS A DOUBLE HEATER.

THE

CHICAGO STOVE WORKS

Blue Island Ave. and 22d St., CHICAGO

There Are Indians and Indians

Song of Hiawatha up-to-date

Have you heard the wondrous story,
How the red man, in the far west,
Learned a lesson of the WHITE man,
How to guard against the North Wind,
'Gainst the "fierce Kabibonokka,"
To protect his "squaw" and "papoose"
In their frail and humble "wigwam;"
SOHN, the mighty stove man, taught him
Showed him how to use a WHITE'S stove.
Now the children of the prairie
Need no longer fear the Storm King,
When he swoops down on their hamlet,
Mountain View, in Oklahoma.
There the WHITE and red man dwelleth
There the people know a "good thing;"
And they tell us of an Indian
Who thus sought to show his friendship
For the maker of his WHITE stove:
With his moccasins he parted;
Gave his "moccasins of buck-skin,
Thick with quills and beads embroidered;
Sent them far away to Quincy,
On the rolling Mississippi.
Sent this gift unto the WHITE man,
As a token that he loved him;
Loved the man in Illinois,
Loved him for the joy and comfort
He and SOHN, the stove man, gave him.

THE FOLLOWING LETTER EXPLAINS ITSELF:

CUTLERY AND AMMUNITION. STOVES AND STOVE FURNITURE.

SOHN HARDWARE CO.

WHITES STOVES & RANGES THE FUEL SAVERS

FARM IMPLEMENTS

WIRE AND NAILS
SHELF HARDWARE

BUGGIES AND HARNESS
CHAMPION MOWERS AND BINDERS

MOUNTAIN VIEW, OKLAHOMA, 9-30, 1902.

THOS. WHITE STOVE CO., Quincy, Ill.

GENTLEMEN:—Pardon us, but we sent you, by mail, one pair of Indian moccasins. We were showing a White's stove and a burly, big, buck Indian came in and wanted to tell what a heap good stove it was, as he had one. He was wearing these moccasins, and we told him that if he would let us have them we would send them to the man who made his stove. This seemed to tickle him very much, and he took them off and gave them to us.

Respectfully,
SOHN HARDWARE CO.

WHITE'S STOVES & RANGES THE FUEL SAVER

A Complete Line

THOMAS WH

QUINCY,

WHITE'S

STOVES AND RANGES

White's Poplar

is a finely fitted and mounted cheap Oak Stove that will meet any competition.

White's Poplar.
Nos. 12, 14, 16, 18.

White's Oak

with base cast in one piece is the very best Oak Stove on the market.

White's Oak.
Nos. 14, 16, 18, 20.

Our Fortieth Annual Catalogue is just Out Why not Send for One?

ooks and Heaters.

E STOVE CO.

. ILLINOIS

PENN DIAMOND.

Large and Responsible Buyers

will find it advantageous to get our prices.

Our Goods are Right in Appearance, Construction and Price. They are "all right."

The Penn Diamond

Square Parlor Stove and Double Heater

represents the **very latest Design** of modern heater construction.

In appearance **it is not surpassed** by any base burner upon the market, and in its construction we have used every effort to meet the requirements of the most progressive and fastidious dealers in the trade.

The Penn Air Tight

Is a Surface Burning Stove and Double Heater for Hard Coal or Soft Coal.

It is a Modern, Handsome, High-Class Stove and Double Heater.

It is **substantial, durable,** and of **unusual heating capacity.**

It is made either with a heavy cast iron cylinder or with sheet iron cylinder and fire brick lining.

Write for Catalogue.

Although we will show other of our goods in this space, this advertisement will not appear again.

PENN AIR TIGHT.

The Mt. Penn Stove Works,

READING, PA.

STEEL RANGES

With Reservoir and High Closet

We have Steel Ranges to burn for immediate Shipment . . . . .

We will sell you the best made Planished Iron Range with 20x22 inch Oven, Reservoir and High Closet at a ridiculously low price. It scales 550 lbs. This tells its quality. We have other goods of obsolete patterns well made at your price. ∴ ∴ ∴

Address Range Bargain

Care of The American Artisan,

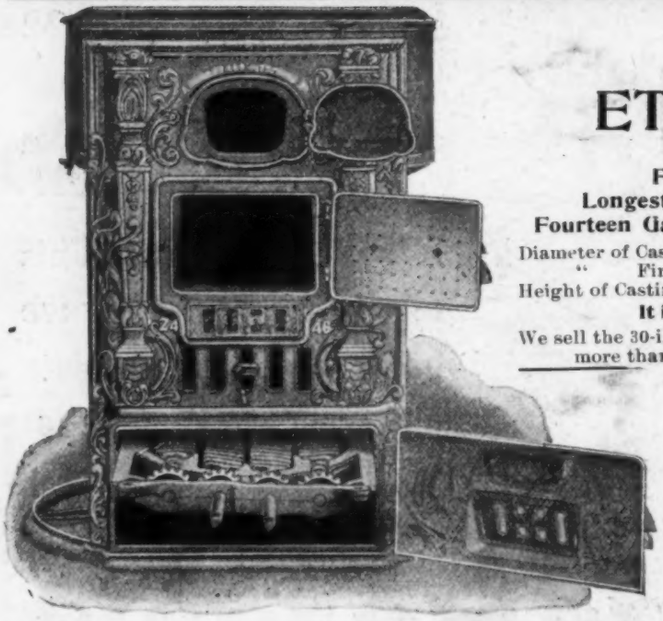
69 Dearborn St. CHICAGO, ILL.

MILLER STEEL PLATE RANGES

Lead in Quality
Lead in Price
Lead in Durability
Lead in Appearance

Why Not Write for Catalogue

The WM. MILLER Range & Furnace Co.
CINCINNATI, OHIO.



*Old king **Coal**, the merry old soul*
Is now shipping many a ton,
For Roosevelt said, "I'm not in a hole
*When I have **one leg** to stand on."*

ETNA FURNACES

(FOR HARD OR SOFT COAL.)

Full Return Flue. Low in Height.
Longest Fire Travel. Straight Ribbed Fire Pot.
Fourteen Gauge Steel Radiator. High Wide Ash Pits.

Diameter of Casings,	36 in.	40 in.	46 in.	52 in.	60 in.
" Fire Pots,	18 "	21 "	24 "	27 "	30 "
Height of Castings,	47 "	48 "	52 "	52 "	55 "

It is the Best Proportioned Furnace Made.

We sell the 30-inch fire box size with double casings for very little more than $100.00, freight allowed. Weighs a gross ton.

VERY SPECIAL.

...THE...

ETNA JR. FURNACE.

(FOR HARD OR SOFT COAL.)

Full Return Flue. Cast or Steel Radiator.
Worthy of its Name. Worthy of Us.

Diameter of Casings,	32 in.	36 in.	40 in.
" Fire Pots,	20 "	22 "	24 "
Height of Castings,	45 "	46 "	47 "

Fire Pots are Straight. Ash Pits are High.

We sell the small size with Steel Radiator complete with double Casings for about $1.00 per inch of casing. Freight allowed.

Cut Shows Front View of Both Furnaces.

Compare us with others and we will get your business.

The PITTSBURGH STOVE AND RANGE CO.,
PITTSBURGH, PA.

WE ARE GLAD

to show up every part of our furnaces. There is not a single casting in their entire construction which we are afraid to have you examine

Note...

The Large One-Piece Cast Radiator,

The New Labor-Saving Duplex Grate and

The High Ornamental Front.

Note...

The Large Two-Piece Fire Pot,

The Heavy Feed Dome and

The Strong Ash Pit Section.

SUPERIOR FURNACES STAND THE TEST OF TIME

SEND YOUR ORDERS TO-DAY--WE GUARANTEE IMMEDIATE SHIPMENT:

NEW YORK:
106 Beekman Street.

UTICA HEATER CO.,

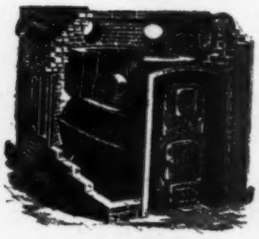
UTICA, NEW YORK.

CHICAGO:
33 Dearborn Street.

Largest Variety. Latest Improvements. Lowest Prices.

Most Reliable and Economical

Heating Apparatus

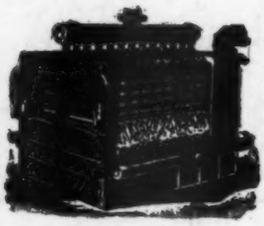


Wood Furnace.

Furnaces,

Hot Water and Combination

Steam Heaters

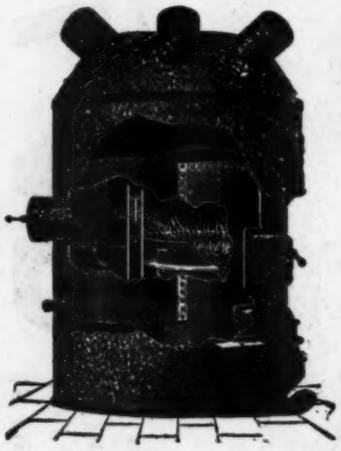


Hot Water Heater.

A Postal Card will bring to you full descriptive Catalogs, Price Lists and Discounts.

BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO. 207-209 Water St., NEW YORK.



Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING Furnace.

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

Manufactured by

Meyer Furnace Co.

Send for Catalogue. PEORIA, ILL.

Handy Pipe.

EMPEROR FURNACES

For Wood

SIMPLE SAFE DURABLE

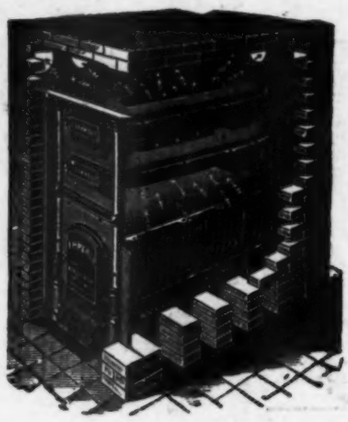
The Best and Cheapest Line of Wood Furnaces

FURNISHED FOR EITHER BRICK OR GALVANIZED IRON CASING.

Send for Catalogue.

Bergstrom Bros. Co.

NEENAH, WIS.



FREDERICK L. CHAPMAN

Editor and proprietor of the "Ram's Horn," Chicago, Ill., has had three of our furnaces for the past five years.

WE ARE **Furnishing the Heating Plant for His New Home**

Three Stores and Eighteen Rooms Besides the Halls at Lake Geneva.

He writes us under date of September 16, 1902, as follows:—
"In simplicity, durability and economy of consumption in fuel they surpass any heater of a similar kind with which I have had experience. You are to be congratulated at the success you have attained by reason of the quality of your furnace and your honorable method of doing business."

QUAKER MANUFACTURING COMPANY

Successors to WIRETON HEATING CO.

CHICAGO HEIGHTS, . . ILLINOIS

Makers and Jobbers of the Quaker Line of Heaters (cast and steel), Registers, Regulators, Pipe, Fittings and Furnace Supplies.

WE DON'T CARE

What Kind of Fuel is to be Burnt. We Make

FURNACES and BOILERS

That Burn Any and All Kinds, and if You Sell Your Customer a

MUELLER

You Will Please Him.

WRITE FOR CATALOGUE AND PRICES.
EVERYTHING IN THE HEATING LINE.

ESTABLISHED 1857.

L. J. MUELLER FURNACE CO.

191 REED STREET, MILWAUKEE, WIS.

Monarch Air-Blast

MADE ESPECIALLY FOR SOFT COAL

Soft coal in a perfect state of combustion produces an intense heat, hence this furnace is made extra heavy allowing ample room in all joints for expansion. Every part of the Mammoth Air-Blast Furnace is made of Cast Iron.

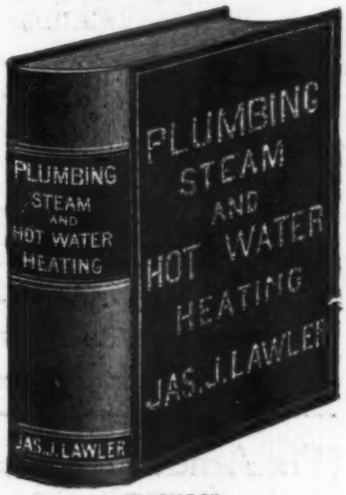
SEND FOR CATALOGUE

THE FOREST CITY F'DRY. & MFG. CO.
CLEVELAND, O.

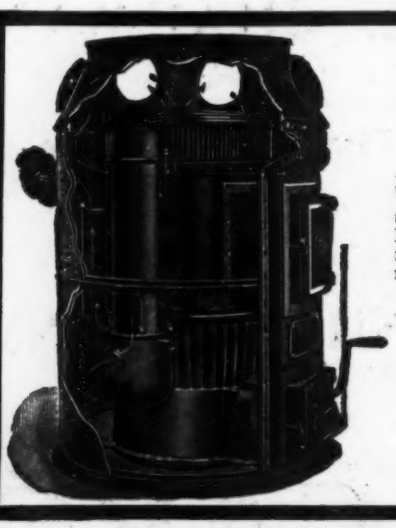
Modern Sanitary Plumbing

Steam and Hot Water Heating

An Encyclopedia of Practical Plumbing. By JAMES J. LAWLER. 400 pages, large octavo. Size 6x9 inches. Price **$5.00.**



FOR SALE BY
DANIEL STERN,
69 Dearborn Street. CHICAGO



Do not

you like the way these furnaces are built as shown by the cuts? The construction is substantial and they will last. The *FLORAL CITY* is a furnace on which a dealer can gain a reputation.

Monroe Foundry & Furnace Company

MONROE, MICHIGAN

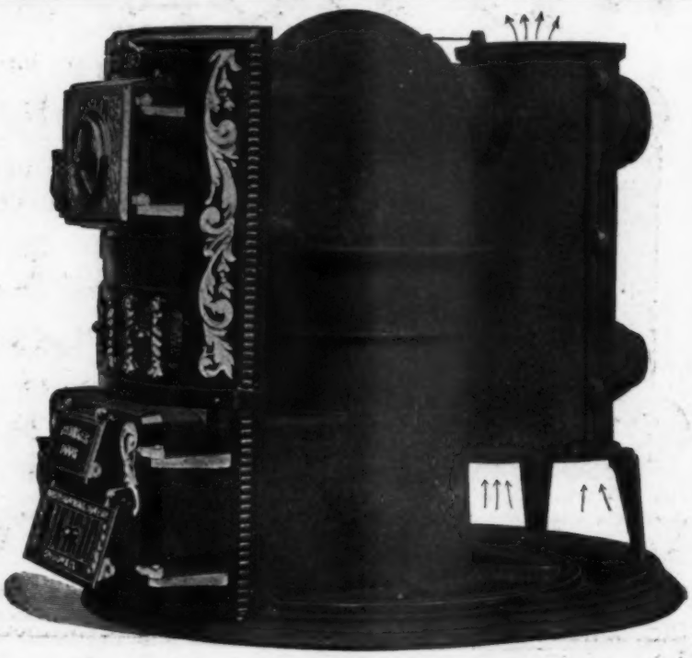
FRIENDS

are what you need to prosper, Mr. Dealer, and you will make friends of your customers if you handle the **CROWN FURNACES.** These Furnaces are economical of fuel, and are generally satisfactory to users.

Write for Catalogue.

March-Brownback Stove Co.,

POTTSTOWN, PA.



CLARK'S CELEBRATED UNDER-FEED FURNACE.

Is the best heater on the market for burning the cheaper grades of slack and nut coal.

Every part of this furnace is made with great care, and is very strong and durable.

The feeding device is hung oscillating.

The radiator is on the top.

The entire furnace is cast iron.

It has but three joints.

It is a comparatively smokeless furnace.

The grate does not shake but revolves.

WRITE FOR CATALOGUE

W. A. CLARK & CO.

35 PIKE STREET :: :: :: COVINGTON, KY.

The American Artisan Manuals Handsomely and substantially bound. Highest authority in the particular field they cover. **Price, $3.50 each**

For Sale by DANIEL STERN, 69 Dearborn St., Chicago

The New Schill Range!

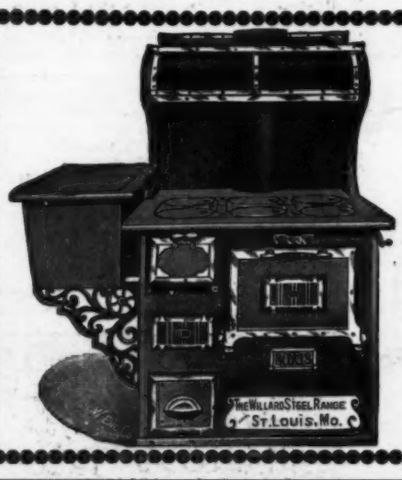
The Most Modern and Up-to-Date Range Made To-day

Possessing several special and novel features not found in any other line. It must be seen to be appreciated.

THE above cut shows range with flush reservoir and high closet, and front or pouch feed, also draft door below pouch feed which can be opened to light fire, which is a most desirable feature. Another very desirable feature is our reservoir casing which is cast iron, and front of same is covered with sheet steel thus giving it the appearance of a steel front, saving labor in blacking. Right end of reservoir casing is handsomely ornamented. It has spring balance oven door, ventilated oven, extra large ash pan, screw draft plate, very handsomely nickeled and is decidedly the latest in stove construction.

THE SCHILL BROS. CO., Crestline, O.

The Nelson & Bouquet Hardware Co., Minneapolis, Minn., Northwest'n Agts.
J. C. Shanks, 1547 Wazee Sreet, Denver, Colo.
H. A. Potter, 35 New Montgomery Street, San Francisco, Cal.
Chas. H. Greene, 5085 Fairmount Avenue, St. Louis, Mo.



The Willard Steel Range

combines LOW PRICE
and HIGH QUALITY.

Dealers who handle it control the steel range trade of their locality. Why not write us for Agency?

Wm. G. Willard, Mfr.

619-621 N. Fourth St., ST. LOUIS.

O-RIB-O WARE

O-RIB-O Galvanized Pail.

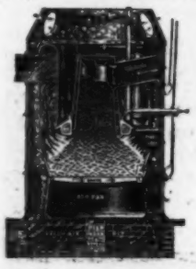
O-RIB-O King.

O-RIB-O Galvanized Tub.

THE PRESENT SENSATION IN THE METAL WARE TRADE.

Buy either direct or of Jobbers. Patented and made solely by

BRISCOE MFG. CO. (THE O-RIB-O PEOPLE) **DETROIT, MICH.**



Bust the Coal Trust

Why pay from $8 to $10 per ton for Hard Coal to heat your Homes?

The Bryce Self-Feeding Furnace

Will give **better** results with less trouble on coal costing from $2 to $3 per ton.

Write for Catalogue to Toledo, Ohio.

THE BRYCE HEATING AND VENTILATING CO.

BUY THE **BLACK KID STOVE POLISH**

AND DON'T PAY FOR IT IF NOT THE BEST YOU EVER USED.

FIVE POUND CANS---65 CENTS EACH.

TRY IT IF YOU WANT SOMETHING EXTRA FINE FOR YOUR SAMPLE STOVES

BLACK KID NICKEL PLATE STOVE POLISH CO., MANUFACTURERS, CHICAGO.

RICHMOND

Tank Heaters & Laundry Stoves

None Better Made

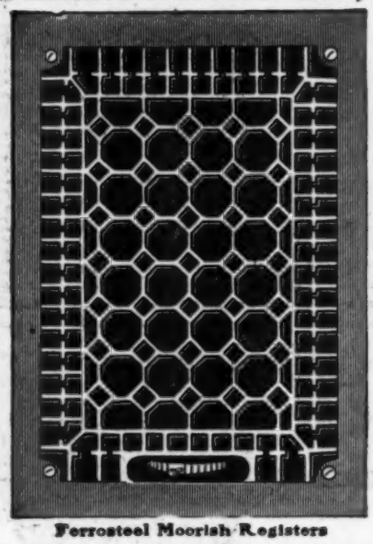
BUY one and TRY one

Send for our 1902 Catalogue and PRICES ALSO

THE RICHMOND CO., Norwich, Conn.

New York 738 Park Row Bldg. Philadelphia 18-24 So. 7th Street. Pittsburg 210 Ferguson Bldg.
Chicago Chicago H. & S. Co. St. Louis Rumsey & Sikemeier

FERROSTEEL CO., CLEVELAND, OHIO



Ferrosteel Moorish Registers

Ferrosteel New Convex

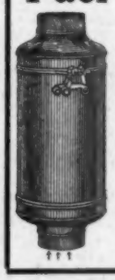
STANDARDS OF COMPARISON

All Sizes and Finishes. Immediate Shipment. Easiest Terms. Lowest Prices.

FERROSTEEL CO., CLEVELAND, OHIO

BURTON'S

Fuel Economizer

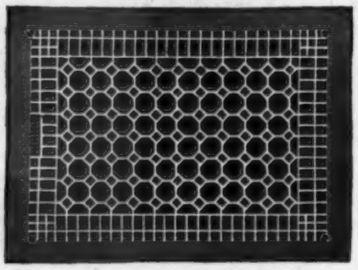


Attached to a stove pipe saves more fuel and radiates more heat than any other stove pipe attachment.

AN EASY SELLER

Assertions Backed by Guarantee

W. J. BURTON & CO., Mfrs.
DETROIT, MICH.



WE MAKE RIGHT PRICES AND PROMPT SHIPMENTS

All Sizes—All Styles of Finish

Quality and Finish Unexcelled

HENRY & SCHEIBLE CO.

6-8-10 Long Street
CLEVELAND, O.

H. G. Groth
Cedarburg, Wis., Writes:

"Please take out my advertisement for a tinner. I am "overflooded" with letters from all parts of the State, and was able to select one of them."

I can hold my hand over my chimney. No waste heat. I us a Rochester Radiator and save half the fuel.

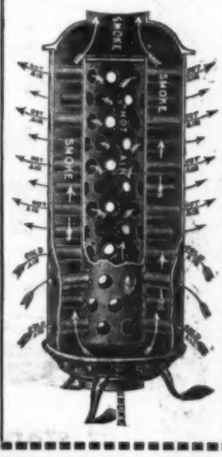
The greatest leak in household economy is the loss of heat up the chimney. This was supposed to be unavoidable until the

Rochester Radiator

was invented; now it is cheaply and thoroughly controlled by the many cross tubes. Dealers find an ever-growing trade. Why not put in a stock and get up a boom in your town.

Rochester Radiator Co.

100 Furnace Street, Rochester, N. Y.



BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogue.

MILWAUKEE, WIS.

Royal Heaters.

MANUFACTURED BY THE

HART & CROUSE CO.

UTICA, N.Y.

ALL THE LEADING LINES OF

STEAM, HOT WATER & HOT AIR,

FOR HEATING ALL CLASSES OF BUILDING.

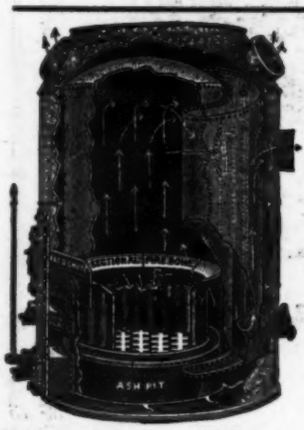
235 WATER ST. N.Y. COLUMBUS, O. BRANCHES. 29 LAKE ST. CHICAGO, ST. LOUIS.

COMMON SENSE

CIRCULATOR AND RADIATOR.

This heater is so simple in construction that any person who has any knowledge of the principles of heating can readily see the natural advantages it has over others. It does not obstruct the draft. It is easily cleaned out or repaired when necessary. It produces a circulation unequaled by any other article of the kind. It sells itself to all who understand that the true principle of heating is by circulation and not by radiation. It takes the place of a joint of pipe. The 6-in. is 10½-in. in diameter and the 7-in. is 12½-in. It has no equal as a practical fuel saving device and the price so small that no person can afford to use a stove or furnace without one. Send for particulars.

A. C. SELLECK,
755-757 W. Madison St., Chicago, Ill.



The Torrid Zone Furnace

will make you more money than many others.

First, because it gives your customer satisfaction.

Second, it is easily set up and cased.

Third, it has points of merit that others do not have to point out to the customer.

Fourth, the price is right. We give you your choice between a castiron and brick lining at the same price.

Write for catalogue and prices on Hot Air Furnaces and Combination Heaters.

Lennox Manufacturing Company,

Cor. 9th Ave. & Frederick St., MARSHALLTOWN, IOWA.

Heating and Ventilating Buildings.

By R. C. Carpenter.

Price, $3.00

For Sale by . . . .

Daniel Stern,

69 Dearborn St. CHICAGO.

ROUND OAK
STANDARD of AMERICA

It stands to reason
that a furnace
fitted as carefully
as the
ROUND OAK
will use a very small
amount of fuel
as compared
with the ordinary
cheap furnace.
Price is getting
to be less and less
the principal factor
in selling a furnace.
If you still think
you cannot get
furnace business
without figuring the job
down to the
last notch
we will be glad
to send our
furnace man
to carefully and fully
explain the
ROUND OAK FURNACE
and Round Oak
methods.
You are invited
to write us.
A visit entails
no expense to you
whatever happens.

Estate of P. D. Beckwith

DOWAGIAC, MICH.

Makers of Good Goods only.

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

Terms of Subscription in the United States, their Possessions, and Canada, (invariably in advance): One Year, Postage Paid, $2.00.
In Foreign Countries, Except Canada, One Year, Postage Paid, $4.00.

Address all Letters, communications and remittances to

DANIEL STERN, Publisher and Proprietor,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

This Paper is a Member of the Chicago Trade Press Association.

CHICAGO, OCTOBER 25, 1902.

THE development of the steel and iron industry of the United States during the last thirty years, as shown by census comparisons, is without a parallel in the industrial history of the world. From one of the smaller producers of these products, this country has risen during this time to the position of the largest producer in the world.

IT is said that a Whitewater, Wis., man has been experimenting with a view to producing Wisconsin peat in marketable form. He has invented machinery, which, it is claimed, will produce 20,000 tons of peat a day in compact form, to take the place of egg and the larger sizes of coal, for use in stoves and furnaces. It is said that this new product has an advantage over coal for the reason that it produces neither smoke, dirt nor gases.

IT is said that J. Pierpont Morgan has long deemed it inevitable and not only inevitable but from the economic and social point of view altogether desirable that the great aggregations of capital be followed by corresponding units representing trades associations, these undoubtedly ultimately to be federated. If he could feel certain that the trades associations were to be conducted upon sound economic principles then there would be nothing in his view but gain both for capital and labor.

THE growing importance of South Africa as a market for products of the United States is illustrated by some figures just received by the Treasury Bureau of Statistics. They show that the importations into Cape Colony, Natal, Delagoa Bay and Beira amounted last year to more than 150 million dollars, or nearly treble the total for a decade earlier. These figures are published by the British South African Export Gazette. They show that the imports of Cape Colony in 1901 were $104,220,000; those of Natal, $46,500,000; Delagoa Bay, $993,374, and Beira, $2,037,088, making a total of $153,750,462. This is a marked increase over the imports of the preceding year and is two and a half times as much as the total for 1892, a decade earlier.

THE practical termination of the anthracite coal strike has served to stimulate the demand for iron and steel products. Previous to the announcement that the President's terms of arbitration had been accepted by both factions, buyers were in a hesitating mood and orders were few and far between. At present the demand is almost as brisk as it has been at any time this year and manufacturers appear to be convinced that the volume of business next year will be in excess of that of the current year.

THE recently completed twelfth census shows a wonderful spreading and enlargement in the territory covered by many manufacturing industries of the United States. But a few years ago New York state and the states that compose the New England group manufactured nearly the entire output of agricultural implements. To-day Illinois easily leads all other states in the manufacture of agricultural implements, making over forty per cent of the entire output. While Brockton, Mass., continues to be noted for its shoe industries, Danbury, Conn., for hats, Troy, N. Y., for collars, and Gloverville, N. Y., for gloves, the manufacture of these lines are not near so exclusively confined to these cities as they were a few years ago. The manufacturing interests show phenomenal development and the wide scope of territory now covered by this great branch of American industry is not alone due to the increasing demand, but also to the changes in the production of raw material, the ample transportation facilities, and the new markets that have opened for the consumption of every line of manufactured products.

ELECTRICITY, as every one knows, has achieved marvels, and that it is destined to achieve still greater things in the future years than it has done in the years that have elapsed is the general expectation of all intelligent students of the subject. In reflecting upon this theme, we at once find ourselves confronted with a problem of some considerable magnitude. Thus we know the nature of the changes which this wonderful agency has accomplished in the industrial, the social, and in the manufacturing world—that is, up to the present hour. Still, we really cannot foretell what it will bring about in the coming ages. We are nevertheless pretty safe in concluding that the changes, whatever they be, will be largely fashioned by the nature of the new electrical inventions which will be called into practical operation in the future (and of which we as yet know nothing), and by the special requirements of the times. At this present time we seem to be in want of an improved apparatus for storing electricity in such a form that it can be safely and economically utilized. Such a discovery would, in the opinion of this critic, revolutionize all our industries, and turn even the stream of history into another channel. 'Tis all quite possible. Moreover, we

will possibly be in possession of the thing wanted much sooner than any person just now anticipates. One never knows what a month or a year may produce in the way of invention in these busy times of industrial progress, commercial enterprise, and rare inventive fertility.

Arbitration.

SEPOY and spahi, chasseur and condottiere, uhlan and voltigeur; janissary and bashi-bazouk, franc-tireur and zouave have been no mean impost on old-world progress. The lineaments of truth are to be seen in every line of the cartoon of a German peasant staggering under the weight of a German soldier.

It is no palpable exaggeration to say that the shackles of militarism stifle every European industry to a greater or less extent. Happily we are freed from the support of a vast standing army. There is little likelihood of American infantry forcing the chapparals of Chihuahua or American cavalry galloping over the Manitoba marshes for some time yet.

Prince Henry of Germany has visited us as a token of amity. The czar is outwardly friendly. France sent us the Bartholdi statue. A gigantic zollverein which will prohibit the export sale of American products, is a chimera.

But war within the fabric of our industrial system is by no means so problematic as a foreign complication, and is likely to prove equally as disastrous in some fields of industrial endeavor at least.

Of course when the loss of the blood which dyed the grass of San Juan hill is considered, all comparisons are inadequate, but taken on the financial side alone, it is a mooted question whether the coal strike was not a heavier blow to the American people taken in the aggregate than the Spanish war.

The locomotive in the roundhouse, the banked fire in the cupola, the stationary flywheel, the silent loom, the derailed street car, all tell a story of investments whose earnings of dividends have stopped temporarily and idle laborers who are forced to draw on past savings or even to mortgage their future earnings in order to provide the day's bread for their dependent ones. Shakespeare in Julius Cæsar truly said "the evil that men do lives after them." But even more energetically can it be said that the noxious effects of strikes remain long after the points at issue have been satisfactorily settled. Remedies may check the disease, but the taint remains in the industrial system. The coal strike seems on a fair way to settlement, but for many months to come millions of people will suffer, many to a very small extent it is true, from five months' stoppage in the mining of anthracite coal. Of course industrial harmony year in and year out is a will o' the wisp—a pot of gold at the end of the industrial rainbow. Perpetual pacification is as much of an impossibility in the mine as it is in the home and in the factory as it is in the political arena.

Perpetual motion is impossible, as friction cannot be entirely eliminated, but modern mechanical devices are reducing it marvelously. For the good of the public the friction between capital and labor should be minimized by the use of arbitration wherever possible.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

A retail stove dealer in western Wisconsin, who is quite a literary man, met our friend, Chas. Lindemann, in front of the Pfister Hotel, Milwaukee, the other day and the following conversation ensued:

Literary Dealer—"Have you read 'Mrs. Wiggs of the Cabbage Patch'?"

Mr. Lindemann—"No."

Literary Dealer—"Have you read 'On the Road to Frontenac.'"

Mr. Lindemann—"No."

Literary Dealer—"What have you read?"

Mr. Lindemann—"I have read Cross Oaks. Want a carload?"

* * *

READERS of Martin Chuzzlewit will remember the feeling of outraged delicacy that swept over a strong-minded female character when Martin, in reference to some question, replied, "I can see that with the *naked* eye." I wonder into what throes of outraged modesty this impossible creation of Charles Dickens would have been thrown had she picked up a copy of the "Additions to Stove, Range and Furnace Book, No. 3," recently issued by the Prizer-Painter Stove & Heater Co., Reading, Pa., and on glancing on page 118, had seen there a "*nude* view" of Prizer's air-tight double heater. Oh, Fy! Now wouldn't that make you ashamed? Joking aside, this is certainly a very clever designation for a cast air-tight without its "glad rags" on and is, I believe, a brand new one at that.

* * *

CONSUL WARNER at Leipzig, informs the State Department that the term "unfair competition" is held in Germany to cover all methods that tend to injure a competitor. The law strikes at the evil of fraudulent advertising, false declarations of methods of production and sources of supply and reasons for selling, and, especially against false statements of cost and selling price of goods. Any business man may sue his opponent who does these things, and the penalty is a fine and for the second offense imprisonment. Mr. Warner says that the law has been pronounced very beneficial by the Berlin business men and it is being enforced with great strictness.

Why could not a few laws along these lines be enacted by some of our state legislatures. I picked up the first Chicago daily that came to hand and found the following statements in some of the advertisements:

(A) "Flannelettes, 36 inches wide, very desirable patterns for ladies' wrappers, regular 15c quality, at, per yard, 8½c."

(B) "Fine Gold Fillings half the usual rates."

(C) "Dress Suits 'for a whirl with your girl,' $30. Just like the tailors' $65 all-silk lined ones."

In glancing over a catalogue sent out by a local mail order house I picked out three statements at random:

(D) "Look out for your hardware merchant on locks, door knobs, hinges, latches, sash fixtures, etc. These are big-profit goods with retail dealers. We can save you 25 to 50 per cent on everything in this line, and no matter how little you wish to buy, you will save enough to well pay you

for sending to Chicago for the goods. Freight rates on hardware and building material are low and will amount to next to nothing compared with what you will save in price."

(E) "Out of nearly 15,000 of these saws sold, but one has been returned to us and that showed plainly that it had been abused. No other saw has ever claimed such a good record."

(F) "$8.50 Skirt for $5.95. No. 64380. In offering the Skirt as shown in illustration at $5.95 we are giving better value to the purchaser in this line than any other concern could possibly offer. Made of genuine silk gros grain, full 3½ yards wide, percaline lining and interlined with crinoline. Has corduroy binding plaited back with buttons and cording. Our special price (postage, extra, 43c), $5.95."

(G) "Our new 1899 Model Stanhope, only $43.50. For $43.50 we build and offer our New Stanhope or phaetonette as the equal of buggies in this style that sell everywhere at double our price and upwards. $43.50 is a price based on the actual cost of material and labor, with but our one small percentage of profit added."

None of these statements differ materially from those to be seen in every advertisement of a department store or every catalogue of a mail order house. The seven statements reproduced herewith are all very positive and they may all be true. There is no reason why I should question the veracity of the advertisers. Suppose, however, that the Illinois legislature, a heavy percentage of whose membership are to be elected within a few days and whose personnel could be absolutely determined by the co-operation of the retail merchants of the state, should pass a law patterning after the German law, then:

(A) The department store would have to prove that their 8½c. flannelettes were identical with those commonly sold by the trade at 15c. This might be easy for them. Then again it might not be.

(B) An advertising dentist may do *fine* gold filling at half the usual rates, but there is a chance that a person could get prices on a gold filling job ranging from $50 to $70 from over 100 dentists, and that this advertiser might charge him $50 or even $100 for the same job.

(C) Perhaps a $30 "hand-me-down" dress suit is "just like" a tailor's $65 silk-lined suit in fit, wear, materials. If so the department store making this announcement would be safe from prosecution under the new law.

(D) Turning to the catalogue house announcement I read in regard to locks, door knobs, hinges, latches, sash fixtures, etc., that the man who receives this volume, be he a resident of Ozark, Ark., Grand Forks, N. D., or Celina, O., "can save 25 to 50 per cent on everything in this line" by patronizing the Chicago catalogue man. I may be mistaken, but it seems to me that if that German law were putting in twenty-four hours a day on the Illinois statute book I would not like to be in the shoes of the man who had to prove the absolute truth of this statement.

(E) How about those saws, anyway? It is, of course, probably true that but one saw out of 15,000 of a certain special kind was returned to this catalogue house, but suppose under this proposed law 25 men should come forward and swear they returned one of this special brand of saws—then all I have to say is that the attorney for the mail order people would have to be a crackerjack to get his clients off.

(F) Suppose some other firm should offer the identical skirt at the same money, how could this mail order firm justify their statement? Probably they could, of course, but I don't see how they would set about it.

(G) A Chicago catalogue house offers a Stanhope for $43.50, a price "based on the actual cost of material and labor, with but our one small percentage of profit added." Of course, as is well known, the profits of catalogue houses are very small, but suppose, for sake of argument, some mean man should prove that the labor and material in the Stanhope in question cost $21.75, would not the supply men have trouble in proving that they were only adding their "one small per cent of profit" to the actual cost? What is a small percentage of profit? Can 20 per cent be so considered? Well, perhaps it can, but I don't think so. I don't see where the retail trade would suffer from such a law as this proposed one, but it does look as though some catalogue houses and department stores would have to do a powerful lot of revision of catalogues and announcements when the law went into effect. I am afraid, though, that it will be a long, long time before this German law is generally adopted in this country.

* * *

THE veracious press tells of the recent birth of two little girls somewhere in Iowa, the doctor attending them declaring that their vitality was so low they could not live unless placed in an incubator. Also there was no baby incubator handy, but the little girls' grandmother popped them into the oven of the stove and by use of the oven thermometer kept the oven at the right temperature, so that the young ladies, after a month's residence, came out healthy and happy. Here is a rare advertising opportunity for some stove manufacturer and some oven thermometer man. Whose make of stove was it that domiciled these Hawkeye babies? Whose oven thermometer indicated the oven heat so they neither baked nor froze? Think how striking an advertising circular or trade paper announcement it would make to show a cut of one of our own stoves with a couple of baby girls sleeping contentedly in the oven while a benign grandmother was sitting in an adjacent rocker with one eye on her knitting and one on the oven thermometer!

Why should not the Mellin's food baby find a rival in the magazine advertising pages in a chubby infant who would contentedly smile beneath an inscription, "I was raised in a Tomahawk Steel Range"?

Why should not the "Incubatory Oven" be added to the list of a range's selling points?

* * *

MRS. ADDISON B. RENEALY, wife of a non-union coal miner at Hazleton, Pa., was severely injured on Oct. 21 by an explosion of a bottle containing dynamite in her kitchen stove. Only the rear portion of the stove was blown out. This was a striking proof of the strength of the stove in question, whoever the maker might be.

* * *

A QUEER business combination is reported from Ashland, Ore., where O. T. Biede will start a combination tinshop and oyster house.

News Siftings.

Important discoveries of iron ore have been made in northern Norway.

It is said that a new stove foundry will shortly be located at Greenville, O.

A department store man in Brooklyn claims to have sold 1,000 oil stoves in a single day.

C. Weaner, H. D. Bokop and F. W. Young are interested in a new firm at Defiance, O., who will manufacture a new form of heating stoves.

The Detroit Vapor Stove Co., Detroit, Mich., are erecting a brick factory building, 50x125 feet in dimensions, and four stories in height.

The Peninsular Stove Co., Detroit, Chicago and Buffalo, are sending the trade a handsome hanger showing the Peninsular double heater.

C. F. Jenkins, J. D. Wright and J. M. Baker are the incorporators of the Standard Kerosene Burner & Heater Co., Jersey City, N. J., capitalized at $25,000.

The Clarion Steel Co., operating as agent of a number of leading independent steel firms, recently purchased iron lands in northern Michigan and Minnesota valued at $68,000,000.

Century Stove & Mfg. Co., Johnstown, Pa., are making some important extensions to their plant. They are at present running over time, and are unable to keep up with their orders.

The Atlas Bolt & Screw Co., Cleveland, Ohio, make a complete line of stove bolts, stove rods, machine screws, pointed pins, threaded wire, rivets, special bolts, mica bolts and cold-pressed nuts.

The Pennsylvania Artistic Stove Pattern Works, 218 N. Second St., Philadelphia, Pa., are sending the trade some artistic blotters showing a fox's head and stating that they are willing to submit designs free of cost.

D. R. Sperry & Co., Batavia, Ill., are busy filling orders for their hollowware goods, which includes Sperry's caldrons. These are full measure and are made from original patterns, with metal distributed where it is needed.

The recent high price of coal has proven an enormous stimulus to the manufacture of other styles of fuel. The Briquette Fuel Co., capitalized at one million dollars, has been incorporated at St. Louis, Mo., to introduce this fuel.

John J. Whirl, who has a host of friends in the western stove world and is one of the most energetic pushers of stoves and kindred lines to be met with twixt Michaelmas and Michaelmas, has joined fortunes with the Brand Stove Co., Milwaukee, Wis.

Edward Watson, Eugene Hack, Anton Simon, Geo. Thompson, Chasfl Bierhaus and William A. Cullop, stockholders in the old Enterprise Stove Co., whose plant was destroyed by fire in May, 1902, are incorporators of the Star Shovel & Range Co., Vincennes, Ind., incorporated with a capital stock of $50,000. They started the erection of their factory Oct. 13, occupying the former of the Enterprise Stove Works plant.

The Comstock-Castle Stove Co., Quincy, Ill., advise us that their plant was but slightly injured by the cyclone which struck Quincy on Sunday evening, Oct. 12th, the only damage being done being the tearing off of a small portion of the roof from the corner of the molding room of their factory. This trivial damage in no way interfered with the operation of their works.

The Welling Manufacturing Co., Columbus, Ohio, are manufacturers of the Peerless flue stopper, which is made in either plain or decorated styles. It has steel wire springs instead of sheet iron stays, stays where it is put and is absolutely soot and smoke proof. Prices and miniature samples will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

We are advised by the Pittsburgh Stove & Range Co., Pittsburgh, Pa., that they are very busy running all their foundries to their fullest capacity. Their steel range plant is also unusually busy. This firm are advertising for additional molders and are straining every nerve to keep up with their vast volume of orders. The rush for their goods does not seem to be confined to any particular division, but is spread over the whole line.

The stockholders of the Monarch Stove & Mfg. Co., Mansfield, O., held their annual meeting recently and elected the following board of directors: A. B. Martin, E. C. Baxter, B. B. Maxwell, D. Baxter, L. J. Bonar, B. A. Baxter and J. A. Laser. The directors subsequently elected the following board of officers for the ensuing year: President, A. B. Martin: vice-president, B. B. Maxwell; secretary and general manager, E. C. Baxter and superintendent, B. A. Baxter.

D. G. Cooper, Pequabuck, Conn., is an extensive manufacturer of oven thermometers for indicating the heat of ovens of wood, coal, gas and oil stoves and ranges. These thermometers can be fitted in one or two hours and measure heat just as a clock measures time. They tell when an oven has reached the degree of heat desired and make it easy to maintain a uniform temperature. It informs users how to manage the fire by showing when the oven is nearly at the right heat, when, with a good fire, the front drafts of the stove can be closed and the strength of the fire saved to do the baking. It shows at once when the oven begins to cool off by the hands on the dial moving backward.

Marcus T. Stephens and Cyrus Stephens, of 2113 Shelby street, Indianapolis, Ind., have brought out a new joint for stove pipes. It is said that the peculiar construction of this joint does away with any necessity of the use of rivets and at the same time affords an air-tight connection. The inserted ends on pipe sections are provided with an annular groove and a shoulder, while the overlapping ends have a similar groove and shoulder, except that the latter groove and shoulder do not completely encircle the pipe for the reason that a portion of the ends are cut on an inclination, which intersects the groove and the shoulder.

The Aeolipyle Co., 237 Water street, New York, send us a circular describing their Aeolipyle, which is a contrivance for application to the smoke collar or outlet of a heater. It saves coal, increases heat, keeps an even temperature, prevents the escape of coal gas and avoids all sifting of ashes. It causes the burning of the gas from coal which ordinarily escapes up the chimney, it is claimed, by holding it in check a sufficient length of time for that purpose. It is in transforming this waste into useful heat, that the saving in coal is effected and the other desirable results are obtained. As the burning gas is always of the same temperature the house is consequently kept at a uniform temperature continuously. As this firm have no longer a western office, the western trade should correspond directly with their New York office.

Joseph Huse & Son, 95 Blackstone St., Boston, Mass., have hit on a delightfully clever advertising idea, as they are sending their friends in the trade a pretty gold scarf pin with a small lump of coal in its head, accompanied by the following note: "In presenting you with this little souvenir, we know how fully you will appreciate its value and exceeding rarity. Our original intention was to send you a "white diamond," but we feared it would not appeal to you on account of its commonness. This "Black Diamond" we assure you is a precious gem, becoming more rare and expensive every day. Guard it carefully; the time may come when your children's children will marvel when told that their ancestors were so extravagant as to use such as this for fuel. As you gaze upon this mute reminder of what was, we trust you will not forget that Joseph Huse & Son "is" the firm that can fill your orders for stove repairs promptly and correctly."

STEEL RANGES AT SPECIAL PRICES.

"Range Bargain," care THE AMERICAN ARTISAN, 69 Dearborn street, Chicago, are offering some planished iron ranges with 20x22 inch oven, reservoir and high closet at a ridiculously low price. These ranges scale at 550 lbs. This tells their quality. This firm also have other goods of obsolete pattern, well made, at the dealer's own price. Dealers investigating this offer should answer promptly as it will not hold good very long.

ADVANCE IN STOVE PRICES.

The Southern Stove Manufacturers' Association met in Chattanooga, Tenn., Oct. 16, and decided to raise the price of stoves 10 per cent, on account of the increase in raw materials. Among those present were representatives of the Atlanta Stove Works, Atlanta, Ga.; the Phillips & Buttorff Manufacturing Co. of Nashville; the Rome Stove Works, Rome, Ga.; the H. Wetter Manufacturing Co. of South Pittsburgh; The Mountain City Stove Works of Chattanooga; The Chattanooga Stove Works, Chattanooga; The Bristol Stove Co., Bristol, Tenn.; The Avondale Stove Works of Birmingham; The Dalton Stove Works, Dalton, Ga., and several others.

The meeting was called by the president for the special purpose of increasing prices. One of the gentlemen stated that on account of the great increase in the price of coke, through the coal strike, and the raise in the cost of iron, brass and other essential as well as the demand for higher wages by laborers, it was necessary to make this increase, which, it is said, will not increase the profit of the stove manufacturers, but will place them on the scale that heretofore existed.

NEW POSITION FOR POPULAR STOVE MAN.

The Prizer-Painter Stove & Heater Co., Reading, Pa., are sending out the following self-explanatory letter to the trade:

"It is our privilege to announce that William S. Essick, formerly general manager and secretary of The Reading Stove Works,—Orr, Painter & Co.—has relinquished his connection with that company to accept the position of sales manager of The Prizer-Painter Stove and Heater Co.

"The demands of our growing business and the inclination of Mr. Essick to enter a wider and more congenial field for the exercise of his energy and skill, fortunately coincided with our uniform policy of enlisting the ablest and most experienced men in our several departments.

"Mr. Essick is recognized by stove manufacturers and merchants as a leader in the industry.

"We have always made it a point to keep in close touch with the trade, and to place at the disposal of the stove merchant whatever knowledge of the business we possess or could command. In pursuance of this policy Mr. Essick will from time to time, as his duties permit and as opportunity affords, call upon the trade in the interest of Prizer stoves, ranges and furnaces, and with the purpose of giving us an intimate and continuous insight into the needs and requirements of the retail stove merchants.

"Hoping for still closer relations with the trade and for still greater mutual helpfulness and profit in the future, we commend Mr. Essick to your personal and business consideration."

A HANDSOME CATALOGUE.

The Mt. Penn Stove Works, Reading, Pa., send us their handsome catalogue devoted to their line of stoves, ranges and heaters. This firm are offering a magnificent line of goods and large and responsible buyers will find it advantageous to secure their prices as their goods are right in appearance, construction and price.

The Penn Esther is a heavy durable and handsome range, very striking and artistic. It is highly nickel-plated, including nickeled top band, outside oven shelf, pedal attachment, name plate, number plate, shaker, lifter, knobs and hinge pins. It has improved Read check damper, insuring quick, direct draft, cut top, ventilated oven, tin-lined oven door, capacious ash pan and three different styles of pipe shelves.

This range has a sheet flue construction The Penn Diamond square parlor stove and double heater has nickel trimmings of the latest fashion, which are all so arranged as to be put on or taken off without any trouble or confusion to the dealer. The cold air is carried from the floor, and the volume of hot air for the room above is increased by inlets of air around and under the nickeled upper section. The effect of

this is not only to increase the power of the Penn Diamond as a double heater, but it makes it a most effective circulating or ventilating stove, keeping the air of the room in which it stands in constant circulation. It is made heavy and substantial, which adds to its durability and radiating power, and it is taken apart in the middle for convenience in handling and repairing. The fire-pot, in particular, is made unusually deep and heavy. The ash-pit is large and deep, and furnished with capacious ash-pan. The heat pipe collar has nickel-plated cover for putting on when the stove is not used as a double heater. There is a cast iron elbow and tea kettle jog. The clean-out stopper is in the front of the base, so that dust can be removed from the flues without inconvenience. The grate is the Ransom improvement of the duplex.

The Penn Perfect furnace is of the cast iron crab construction. It is mounted with heavy sheet steel drums or with cast iron radiator. It has full length cast iron front, highly ornamented and trimmed with nickel, large ash pit, dust and gas proof, sectional fire pot, automatic check draft damper, gas burner, and large vapor pan. One of these catalogues will be forwarded the trade on application. When writing for same kindly add, "Saw it in THE AMERICAN ARTISAN."

PRIZER ADDITIONS.

The Prizer-Painter Stove & Heater Co., Reading, Pa., are sending the trade a little pamphlet showing additions to their Stove, Range and Furnace Book, No. 3. This shows Prizer's air-tight double heater, the Prizer Champion double heater, Prizer Oakland double heater, Prizer Oakland stove, Prizer Glen stove, Prizer Globe stove and the Prizer gas heater for natural and artificial gas. This volume certainly shows the Prizer air-tight double heater up in a way that will quickly impress the reader of this pamphlet with its merits. The heater is shown with and without outside casing. Other cuts show a lady removing the nickeled hood section, removing the main casing and removing the grate respectively.

The double heating device, by which a part of the hot air can be conducted to the room above, is also shown. It will burn bituminous coal or slack, anthracite coal or crushed coke.

The nickel plated parts of this heater are skirt base, strip below ash-pit door, draft valve, check valve, door handles, screw turnkeys, foot rails, hood section, swing top and urn.

The grate and its frame can be easily withdrawn. The feed-door is large and brilliantly illuminated. The mica is protected from smoke by bright perforated metal plates. The Good-'nough fire pot is a feature of great merit in these heaters. The narrow vertical channels conduct intensely heated air onto the surface of the fire. By the use of this fire pot the main strength of the draft is brought up around the outer circumference of the fire and the entire body of the fuel is burned evenly and uniformly.

In this heater the space between the stove proper and the outer casing serves as a circulating hot air chamber. The cold air is drawn from the floor through openings around the base and is discharged at the top thoroughly heated.

The Prizer Champion double heater is a full revertible three-flue base burner for anthracite coal or crushed coke.

The gas burner and draft check admits air in fine jets at the surface of the fire and slightly opening the slide at the middle ring will admit a small volume of heated air for the consumption of the gas at the fire surface, while opening this slide fully will provide a mild check upon the fire. For convenience in handling, the Prizer Champion parts in the middle. The grate is an improved form of the Ransom Duplex. The fire pot is capacious and the grate surface large. The magazine holds a large supply of coal, and is ventilated to prevent the ignition of fuel above its mouth. The foot rails are firmly fastened, and, if desired, may be used as handles to lift the entire heater. The entire hood may be lifted off without removing any bolts.

This firm would be pleased to send one of these circulars to the trade on application. When writing for same kindly add "Saw it in THE AMERICAN ARTISAN.

ALCOHOL GAS STOVE.

Glogau & Co., 17 Quincy street, Chicago, are manufacturers of the alcohol gas stove shown in the accompanying cut. It is very desirable for travelers, in the sick room, camp, for chafing dishes, light housekeeping or wherever gas is not available or desirable. This stove manufactures its own gas and is always ready. It is portable and is absolutely safe. Its wick is invisible and never requires renewal. It is odorless, burns steadily, weighs only eight ounces, can be upset without spilling the alcohol, and boils a quart of water in twelve minutes. It has a reservoir holding seven ounces of alcohol and can employ either wood or grain alcohol.

Alcohol Gas Stove.

MILLS WILL NOT CLOSE DOWN.

The policy of the United States Steel Corporation to keep its plants in operation despite unfavorable market conditions is being carried out, according to the daily press. The only dull lines in the steel industry during the last two months have been sheets, wire and tin plates. This was not due to a falling off in demand, but to an excessive producing capacity. As a result many of the sheet mills were forced to suspend operations, and fully 50 per cent of the tin plate mills of the American Tin Plate Company were closed. The wire mills were beginning to suffer for lack of orders when the American Steel and Wire

Company reduced the prices of plain wire $7 a ton, thus giving steady employment to all of their workmen. Since the cut was made a week ago the combination has booked a large number of orders and the plants will be kept in operation during the winter.

Several sheet plants were closed, and in order to get business the American Sheet Steel Company made a reduction of $5 a ton. As a result the plant at New Philadelphia and four mills of the Wellsville plant, which have been idle for nearly two months, were put in operation Oct. 13. It is understood that every mill of the sheet and wire combination will be operated steadily.

WHISPERS OF THE SEASONS.

This is a beautiful little volume of poetry recently issued by the Harper-Century-McClure Co. It contains four poems entitled Spring, Summer, Autumn and Winter, these poems being felitiously named as they have no connection whatever with the seasons in question. We cite from this volume as follows:

ODE TO SPRING.

Remember, that I am thy man,
Whom thou must care for all you can.

Thou shalt always look pleasant and bright,
No matter how late I come home at night.

Thou shalt not scold indoors or out,
Or chew the rag 'round about.

My mother's advice thou shalt take,
Be careful therefore and not make a mistake.

Remember, 'tis thy duty clear,
To mend my socks throughout the year.

Thou shalt in manner mild and meek,
Bake me good pies throughout the week.

If the hired girl does not do just so,
Remember, that, I do not want to know.

Thou shalt not let the baby weep,
Or let it disturb me in my sleep.

Thou shalt remember, my dear honey,
It hurts my feelings to part with money.

To keep expenses low, so I will not act cruel,
I will buy a CHAMPION, which saves one-third the fuel.

A SUMMER SONNET.

Colebrook's Asbestos Cement,
For years has stood the test,
'Tis best to chop out other kinds,
For Colebrook's is the best.

It does not crack or crumble,
And is the best there is.
Insist on having Colebrook's,
You need it in your biz.

AUTUMNAL LYRICS.

Old King COAL *is the* merry old soul,
Who has been boasting how well he felt.
He said to himself, "I have them all in a hole."
Did he say all? Well—all but Roosevelt.

A WINTER RHAPSODY.

Have you heard the wondrous story,
How the red man, in the far west,
Learned a lesson of the WHITE man,
How to guard against the North Wind,
'Gainst the "fierce Kabibonokka,"
To protect his "squaw" and "papoose"
In their frail and humble "wigwam"?
SOHN, the mighty stove man, taught him;
Showed him how to use a WHITE'S stove.
Now the children of the prairie
Need no longer fear the Storm King,
When he swoops down on their hamlet,
Mountain View, in Oklahoma.
There the WHITE and red man dwelleth,
There the people know a "good thing";
And they tell us of an Indian
Who thus sought to show his friendship
For the maker of his WHITE stove.
With his moccasins he parted;
Gave his "moccasins of buckskin,
Thick with quills and beads embroidered";
Sent them far away to Quincy,
On the rolling Mississippi.
Sent this gift unto the WHITE man,
As a token that he loved him;
Loved the man in Illinois,
Loved him for the joy and comfort
He and SOHN, the stove man, gave him.

A LOYAL PHILADELPHIAN.

T. James Fernley is a man of singular broadness of mind. As secretary-treasurer of the National Hardware Association he interests himself in helping the cause of jobbers in Maine and Florida, Mississippi and Wisconsin, Texas and Oregon.

The Nebraska jobber and the Massachusetts jobber find in him an invaluable assistant. The cosmopolitan character of the work so efficiently performed by Mr. Fernley does not abate one jot or tittle from his loyalty to Philadelphia. Mr. Fernley is proud of the great metropolis on the Schuylkill and believes in doing everything in his power to help it along.

On Oct. 20, 10 a. m., the population of the Quaker City was increased by two, as a couple of charming young ladies engaged board for the next twenty-one years at the Fernley home, and hereafter when Mr. Fernley makes a schedule of his possessions he will write "one-half dozen children," instead of "one-third dozen children," as heretofore. We extend congratulations to Mr. and Mrs. Fernley. Mr. Fernley is a trifle shy on girl's names, and on the way to New Orleans will study the nomenclature of Pullman palace cars with unusual attention.

The John Van Range Co., 419 Elm and 410-416 Home street, Cincinnati, Ohio, are makers of Van's patented improved wrought steel portable range for hotels, restaurants, public institutions, boarding houses and private families. They also make all kinds of hotel implements for culinary purposes.

A. C. Selleck, 755-757 West Madison street, Chicago, is manufacturer of the Common Sense circulator and radiator, which is simple in construction and easily cleaned out or repaired when necessary. This circulator takes the place of a joint of pipe. The 6-inch is 10½ inches in diameter and the 7-inch is 12½ inches.

The Bridgeport Crucible Co., Bridgeport, Conn., are enjoying a large trade in their Champion stove clay, which is claimed to be the best and most refractory lining made and the only stove lining made of crucible materials. It is packed in two and one-half pound, six-pound and ten-pound pasteboard boxes and also in bulk.

The Hardware Record.

American Hdw. Mnfs. Assn.

Pres., F. R. Plumb, Philadelphia.
Vice-Pres. — Samuel Nicholson, Providence; C. S. Van Wagoner, Cleveland; F. S. Kretsinger, Fort Madison, Ia.
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Arkansas Retail Hdw. Dealers Assn.

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Chicago Retail Hdw. Dealers' Assn.

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Pres., William C. Peters.
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Illinois Retail Hdw. Dealers' Assn.

Pres., H. G. Cormick- Centralia.
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Indiana Retail Hdw. Dealers' Assn.

Pres., W. P. Lewis, New Albany.
V.-P. Jas. L. Fulton, Portland.
Sec.-Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hdw. Assn.

Pres., J. G. Smith, Canadian.
1st V.P., Fred Parkinson, Wagoner.
2d V.-P., E. C. Stretch, Vinita.

Iowa Retail Hdw. Dealers' Assn.

Pres., W. A. McIntire, Ottumwa.
V.-P., J. Seither, Keokuk.
Sec., W. H. Keating, Ottumwa.
Treas., Geo. Lister, Manchester.
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Kansas Hardware Dealers' Assn.

Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., W. T. Oldham, Mt. Sterling.
1st V. P., J. L. Macin, Vine Grove.
2d V.-P., W. S. Shacklett, Fulton.
Sec., Paul Wagner, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres. T. Frank Ireland, Belding.
V. Pres. John Popp, Saginaw.
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Minnesota Retail Hardware Assn.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Treas., W. E. Barto LongPrairie.
Sec., M. S Matthews, Mnpls.
Exec. Com., W H Tomlinson, Le Sueur, H. S. Cleveland, Minneapolis; F. E. Hunt, Red Lake Falls; Benj. F. Kernkamp, St. Paul; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; C. F. Ladner, St. Cloud; J. Schmidt, Wabasha; E. H. Loyhead, Fairibault. A. T. Stebbins, Rochester; J. McGuire, St. Paul.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., Tayler Frier, Louisiana.
V.-P., Ed L. Wachter, St. Louis.
Sec., F. M. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrolton; F. A. Kannsteiner, St. Louis; Frank Mayer, Macon.

National Hardware Association.

Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., W. K. Belknap, Louisville; Samuel B. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

Nebraska Retail Hdw. Dealers' Asn.

Pres., T. W. Morton, Omaha.
1st V.-P., C. K. Lawson, Hastings.
2d V.-P., W. T. Coleman, McCook.
3d V.-P., J. C. Cornell, Ord.
Sec.-Treas., Harry Hall, Lincoln.

National Retail Hdw. Dealers' Asn.

Pres., H. G. Cormick, Centralia, Ill.
V.-P., C. N. Barnes, Grand Forks.
Sec., M. L. Corey, Argos, Ind.
Treas., W. Bogardus, Mt. Vernon.
Exec. Com., W. P. Bogardus, Mt. Vernon, O.; O. P. Schlafer, Appleton, Wis.; C. F. Ladner, St. Cloud, Minn.; W. A. McIntire, Ottumwa, Ia.; S. E. Jones, Richmond, Ind.

N. Dakota Retail Hdw. Dealers' Asn.

Pres., H. N. Joy, Hamilton.
V.-P., H. F. Emery, Fargo.
Sec., C. N. Barnes, Grand Forks.
Treas., W. H. Pinkerton, Lakota.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; Anton Enger, Cooperstown; Frank Lish, Dickinson; H. F. Strehlow, Casselton; L. L. Newgard, Grafton.

Ohio Hardware Association.

Pres., W. P. Bogardus, Mt. Vernon.
V.-P., L. F. Stahler, Waverley.
Cor. Sec., D. R. Burr, Piqua.
Fin. Sec., W. C. Jones, Columbus.
Treas., H. A. Waller, Ravena.
Ex. Com., J. B. Carson, Hamilton; C. D. Cussins, Columbus; C. W. Jewell, Utica; M. B. Talmage, Mt. Gilead; H. F. Rahe, Columbus; J. Rohrbacher, Akron; A. H. Strome, Warsaw; Geo. G. Meyer, Cincinnati.

Pennsylvania Retail Hdw. Assn.

Pres., Geo. L. Moore, Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock, C. O. Shroyer, Dawson.

St. Louis Stove Dealers Assn.

Pres.- F. A. Kansteiner.
1st V.-P., Aug. Steinmeyer.
2d V.-P., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Assn.

Pres., F. A. Heitman, Houston,
1st V.-P., Col. B. F. Eshelman, New Orleans.
2d V.-P., John Donnan, Richmond, Va.
Sec., C. B. Carter, Knoxville.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, S. C., C. S. Speer, Hot Springs Ark.

Texas Hardware Jobbers' Assn.

Pres., Jas. Moroney, Dallas.
1st V.-P., J. C. Bering, Houston.
2d V.-P.- J. Burnsides, Ft. Worth.
Sec.-Treas., R. Bell, Weatherford.
Ex. Com., G. A. Trumbell, Dallas; F. A. Heitman, Houston; E. S. Hughes, Abilene; J. J Dickerson, Paris.

Wisconsin Hdw. Dealers' Assn.

Pres., O. Schlafer, Appleton.
V.-P., L. Findlesen, Green Bay.
Sec.-Treas., C. A. Peck, Berlin.
Ex. Com., J. Kornelly, Milwaukee; E. H. Ramm, New London; A. Noll, Chilton; H. L. McNamara, Janesville.

It is said that a new bolt works will be established at West Chester, Pa.

B. C. Trueworthy, a former Bangor (Me.) hardware dealer, died recently.

W. C. Kruger has sold out his hardware business at Newberg, Ore., to A. R. Moomaw & Son.

The hardware store of F. W. Hilton, at Leland, Idaho, was burned recently at a loss of $4,000.

F. G. Smyth & Sons, on Oct. 18, purchased the stock of the Wichita Hardware Co. at Wichita, Kan.

The Point Marion Hardware & Supply Co. are a new hardware firm located at Point Marion, Pa.

The Spear Co., Ventura, Cal., have transferred their hardware and plumbing interests to Duval & Detroy.

The Findlay Axe & Tool Co., Findlay, O., have increased their capital stock from $12,000 to $40,000.

Astly & Hess are successors to John V. Astly & Son in the hardware and stove business at Plymouth, Ind.

The Freeport Hardware Co., Freeport, Ill., have increased their capital stock from $25,000 to $30,000.

The Port Huron (Mich.) Steel & Screw Works have, it is said, been unable to keep up with their orders.

James C. Slater and Ida Heidt are the incorporators of the Heidt Plow Co., Savannah, Ga., capitalized at $50,000.

J. C. Byas, a Humboldt (Tenn.) hardware dealer has assigned. His liabilities are $10,000 and the assets are nominal.

The legislature in the province of Jalisco, Mexico, have granted concessions for the establishment of a nail factory.

J. E. Fowler will shortly enter into the manufacture of cooking utensils and tableware made of aluminum at Athens, Tenn.

The Lee Hardware Co. are a new Salina (Kan.) concern who expect to start in the wholesale hardware business by Feb. 1.

M. S. Hart & Co. have purchased the interest of John Wallace in the hardware business of Hart, Wallace & Co. at Bardstown, Ky.

The Syracuse Hardware & Iron Co., Syracuse, N. Y., have sold the control of their plant to the Burhans & Black Co., of that city.

The store of the Towne Hardware Co., Saratoga, N. Y., was damaged by fire, Oct. 21. The loss is $12,000, fully covered by insurance.

Peter F. Toolen, for a number of years with the Anderson, Ind., plant of the Nicholson File Co., died in that city at 5:45 a. m. on Oct. 13th.

T. A. Stone, F. M. Leake and O. M. Stone are the incorporators of the Bay City Hardware Co. at Bay City, Texas, capitalized at $20,000.

Keller & Janovsky succeed the Merchandise, Hardware and Furniture Co. in the hardware and implement business at North Judson, Ind.

Gustave Koenig, Clarence Corey and W. B. Geery are the incorporators of the Koenig Hardware Co., Howard Lake, Minn., capitalized at $20,000.

George Williams, Augustus Monde and Charles F.

Fairfield are the incorporators of the Barnum Plating Co., of Minneapolis, Minn., capitalized at $15,000.

R. L. Clayton, F. M. Tidwell and E. E. Gray are among the incorporators of the Jackson-Clayton Hardware Co., Cellina, Tex., capitalized at $25,000.

Matthias & Wagner have recently purchased a factory at Waverly, Ia., devoted to the manufacture of a barn door latch, and will remove same to Cedar Falls, Ia.

The Columbus Bolt Works, Columbus, Ohio, are makers of a complete line of bolts, nuts, washers, turnbuckles, bridge and roof rods and all kinds of carriage forgings.

The Seattle (Wash.) Trade Register of Oct. 18 states that the hardware trade in that section is very active and has every promise of remaining so throughout the winter.

W. E. Reynolds, F. W. Gates, G. R. Lynch, S. W. Weats and Robert Davidson are the incorporators of the National Disc Plow Co., Chattanooga, Tenn., capitalized at $30,000.

The Globe Wire Mill Company of Sharpsburg, Pa., have purchased property at Braeburn, Pa., and will shortly commence the erection of a plant, which will employ at least a thousand men.

Jesse Goul, of Goul, Rogers & Co., Anderson, Ind., dealers in hardware, retired from business on Oct. 10th, owing to ill health, disposing of his interests to his brother-in-law, Mr. Rogers.

W. B. Green, formerly manager of the builders' hardware department of the McIntosh-Huntington Co., Cleveland, O., has been promoted to the head of the railroad department of that concern.

V. D. Tinklepaugh, O. Kimmell and Alta M. Woods are the incorporators of the Tinklepaugh-Kimmell Wholesale and Retail Hardware and Vehicle Co., El Reno, Okla. Ter., capitalized at $50,000.

The Locke Steel Chain Co., Ltd., London, Eng., are a new concern capitalized at $1,000,000, who will be sole European manufacturers of tempered steel sprocket chains and attachments under the Locke patent rights.

Kelley, Maus & Co., Chicago, have purchased the property, 659x111 feet, at the southeast corner of Blue Island avenue and Wood street. They have also arranged for a $350,000 building on West Water street, between Randolph and Lake.

The Woods-Harris Iron & Supply Co., Memphis, Tenn., will begin a wholesale business in that city on Nov. 1st, and will handle iron, steel, metal, mill and shop supplies, wagon and carriage wood stock, trimmings and hardware.

The American Steel & Wire Co. are making some important changes in their Salem, O., plant. Their present boilers furnish 440 horse power, and they expect to replace these with a battery of boilers which will furnish 800 horse power.

William E. Denno, a salesman for Lord, Stone & Co., Otter River, Mass., stove manufacturers, is said to have been arrested on Oct. 14th at Utica, N. Y., charged with grand larceny in the second degree. It is alleged that he had failed to turn over to the firm in the neighborhood of $250 of their money, and for this reason a warrant was issued.

S. A. Mangold, a member of the Laun-Mangold Hardware Co. at Wausaukee, Wis., was married to Miss Edith Londo on Oct. 15. Mr. Mangold is very popular in local circles and has many friends in the trade who will wish him joy in his new departure.

The Coughlin Hardware Co., have been incorporated at Topeka, Kan., to succeed the Coughlin-Martin Hardware Co. T. J. Coughlin is president and treasurer, E. L. Mooney is vice-president, and J. J. Kinney is secretary. This company is capitalized at $25,000.

Charles E. Adams of the Cleveland Hardware Co., Cleveland, Ohio, is among the manufacturers interested in the Factory Mutual Fire Insurance Co. of Ohio, formed on account of what are deemed exorbitant rates charged by the fire insurance companies of the state.

The Universal Brush Company, of Troy, N. Y., have elected the following officers: Henry Alexander, president; John Voorhes, vice-president; Arthur L. Payne, treasurer, and Benjamin E. De Groot, secretary. This firm will use a patented process for making their brushes.

The Harlev Burglar Proof Ventilating Sash Lock Co., 92 La Salle street, Chicago, are enjoying large sales of their Harlev burglar-proof ventilating sash lock. This lock, it is claimed, can neither be forced with a jimmy nor opened from the outside. It is as secure when set for ventilation as when closed. It can be put on without cutting the frame or sash at moderate cost and is fully indorsed by all people who are protected by it.

The many friends of Arthur B. Clarke, formerly president of the Old Dominion Iron & Nail Works, Richmond, Va., will be interested to learn that he is president of the recently incorporated American Baking Powder Co., of Richmond, Va., capitalized at $500,000, for the manufacture of baking powder.

The Philadelphia Lawn Mower Company, Philadelphia, Pa., have very much increased their capacity by occupying the entire plant formerly jointly used by themselves and Goodell & Waters, who have removed to their own factory at Nicetown. They have thus more than doubled their floor space for the manufacture of the genuine Philadelphia lawn mowers for hand and horse power, the former being made in fifteen styles and the latter in five styles, suited to all classes of trade in this and foreign countries. This important change has been rendered necessary by the large expansion in their export trade and the constantly increasing domestic demand, and they hope to be in such a position that they will be able promptly to fill all orders for next season, no matter how large the demand. The company also call attention to the fact that they are in a position to furnish extra parts for any of their Philadelphia lawn mowers which have been manufactured since 1863, and that the trade can at any time obtain repairs for any of their mowers regardless of the age of the implements.

OHIO HARDWARE DEALERS FORM AN INSURANCE COMPANY.

For several years the Ohio Hardware Association has appointed committees to take up the question of insurance, which in each case in past years has turned out to be a failure. At the meeting at Cincinnati held in 1901, there a committee was appointed to report a plan at Columbus last February. At this Columbus meeting there was a board of twelve appointed to put into operation this insurance, based on Section 3436 of the statutes of that state. On April 27th, 1902, there was a meeting of the board called at Columbus and rules of the Ohio Hardware Dealers' Mutual Fire Insurance Company were adopted. Under these rules it was necessary to have two hundred separate policies, aggregating $10,000 in premiums. The committee went to work faithfully and Aug. 13 a meeting was called at Columbus for the purpose of completing this work, and Geo. M. Gray, of Coshocton, was selected to canvass for applications. Later H. F. Rahe of Cleveland, J. P. Duffy, of Greenville, Geo. B. Meyer, of Cincinnati, W. C. Jones, of Columbus, C. C. Fouts, of Middletown, and G. V. Guyton of Ada were pressed into service. On Oct. 7th another meeting of the board was called at Columbus, with the necessary amount raised. A couple of attorneys were present, and through them the charter was granted, and J. P. Duffy, of Greenville, president; Geo. N. Gray, of Coshocton, secretary, and Messrs. G. V. Guyton, Geo. B. Meyer and H. F. Rahe directors. The company is now in operation, with headquarters at Coshocton. In writing on the formation of this company one of the directors of this company says: "Realizing as we all did that it was a big undertaking, yet by hard work it has been accomplished, and hope to see the time when the Ohio hardware dealers will have their insurance cut in two."

The officers of this company have sent out the following letter to the membership of the Ohio Hardware Association under cover of Oct. 13:

"You will remember that at the last meeting of the O. H. A. a committee was appointed to procure the organization of an Ohio Hardware Dealers' Mutual Fire Insurance Company. This committee has been faithfully at work ever since the meeting in February. The difficulties at times seemed too great to be overcome, but we are pleased to advise you that the organization is now completed.

"The Ohio Hardware Dealers' Mutual Fire Insurance Company was duly incorporated and organized last week. On Thursday it received its license from the insurance department of Ohio, and it is now a full fledged organization and ready to transact business. We expect to have our policies from the lithographer by the middle of next week, and the policies subscribed for will be promptly issued.

"The following persons were duly elected directors: H. F. Rahe of Cleveland, G. V. Guyton of Ada, George B. Meyer of Cincinnati, J. P. Duffey of Greenville, and George M. Gray of Coshocton. Mr. Duffey was chosen president, Mr. Gray, secretary and treasurer. The principal office of the company will be at Coshocton. The first annual meeting of the company will be held at the same time and place as the next meeting of the O. H. A.

"If you have already made application for insurance, you will receive your policy in a few days. If you have not made it, do not delay. Write to the secretary and your letter will be promptly answered. This company is not formed for the profit of stockholders, but to obtain insurance at actual cost. It will be operated in the most economical manner possible and every dollar of profit over and above the cost of insurance goes back to the policy holders."

A HANDSOME HARDWARE CATALOGUE.

The Lee-Glass Andreesen Hardware Co., Omaha, Neb., send us a copy of their handsome 1,188 page 12⅜ x 9¼ inch catalogue. This volume is a handsome piece of work from the standpoint both of the engraver and the printer. It is printed on a fine quality of paper and is bound in green board covers.

This volume not only illustrates their large and complete stock but is a compilation of valuable information relative to prices, weights, etc. It also contains important facts regarding freight classification and class rates. This volume illustrates and describes in a plain, compact form the various lines of hardware carried in stock and manufacturer's lists and numbers are used as far as practicable. Their building is supplied with every modern device for the rapid disposal of business. This catalogue is divided into eight departments. Department 1, pages 1-247 inclusive, is devoted to builders' hardware; department 2, pages 249-444 inclusive, shows tools and farming implements; department 3, pages 445-808 inclusive, shows miscellaneous hardware; department 4, pages 809 to 896 inclusive, shows tinware and kindred goods; department 5, pages 897 to 1008, shows cutlery; department 6, pages 1009 to 1152, shows guns, ammunition, fishing tackle and miscellaneous sporting goods; department 7, pages 1153 to 1162, is devoted to valuable information, and department 8, pages 1163 to 1188, is devoted to western freight classification.

The hardware encyclopedia has yet to be issued, but this volume is an advance in that direction. This firm carry a large line of goods. Their 24-page index, besides the regulation augurs and awls, pails and pans, springs and spoons carried by all jobbers, contains many specialties, such as cementico and calendar clocks, decappers and disgorgers, squeegees and squeezers.

The department of valuable information was certainly compiled by an erudite and yet practical man. It contains the strength of manila and hemp rope, weight and strength of short link chain, size of bolt heads and nuts, capacity of cisterns in gallons for each ten inches in depth, boiler rivets in 100 lbs., weight of lumber, weight of four-panel doors, weight of iron, seed to the acre, allowances for shrinkage of castings, comparative table of wire gauges, tables of weight and measure, interest laws and statutes of limitations, postal regulations, information for builders, hydraulics, etc.

Every western hardware dealer will be interested in the elaborate tables of western classification, which

will prove a material convenience to this firm's customers.

NATIONAL HARDWARE ASSOCIATION WILL MEET.

Secretary T. James Fernley of the National Hardware Association is actively at work on the program for the forthcoming convention of the National Hardware Association of the United States, which will be held at New Orleans Nov. 19, 20, 21, and promises to be the most successful one held in the annals of the association. The railroad companies have conceded the members of the association a rate of one and one-third fare for the round trip, but a special committee of the association are strenuously endeavoring to obtain a rate of one fare for the round trip.

The program that has been arranged for this meeting is as follows:

PROGRAM.

WEDNESDAY, NOVEMBER 19.

9:30 a. m.—Open Session. Collocution. Mutuality of Interest. Jobber and Manufacturer—By what means can this be best advenced?

2:30 p. m.—Executive Session.

8:00 p. m.—Reception by the Ladies of New Orleans.

THURSDAY, NOVEMBER 20.

9:30 a. m.—Executive Session.

2:00 p. m.—Entertainment Feature.

8:30 p. m.—Evening Session. Manufacturers' Association to meet with the National Hardware Association.

FRIDAY, NOVEMBER 21.

9:30 a. m.—Executive Session.

2:30 p. m.—Executive Session.

4:00 p. m.—Installation of Officers.

GOLD MEDAL FILES AND RASPS.

Mayer & Co., 20th street and Allegheny avenue, Philadelphia, are manufacturers of a complete line of Gold Medal files and rasps. Their line includes mill and round, flat, square, hand and pillar, half-round and three square, warding, stavesaw, mill and one round edge, mill with two round edges, tapers, slim taper, band saw, pit saw, cant saw, Great American cross cut, hook tooth, planer knife, inserted tooth, horse rasps, file rasps and files, and rasps, shoe rasps and last makers' rasps. The files of this company are manufactured from a special high grade tool steel. In order to be on the safe side this firm cut one less blank with their file cutting machines than is usually cut by hand, so as to feel positive that the chisel will give the teeth a hand-cut effect. Each operator has a row of chisels in front of him, which are constantly kept sharp by a man who is a chisel sharpener and nothing else. The foreman sees that each operator changes chisels after a certain number of operators no matter how sharp they may be, so that each and every blank, it is claimed, receives the same attention and the same keen tooth as a hand-cut file.

These files are tempered by a secret chemical process which restores the carbon to the steel after the same has been annealed, after the manner used by the manufacturers of the imported Grobet files. Each file that leaves their establishment is first tested with a piece of hard steel. The files of this firm were severely tested by the Franklin Institute of Pennsylvania and were awarded the Elliott Cresson gold medal for superiority of quality above all other makes. This medal was founded in 1848 and has been awarded four times since then, three times for important discoveries and once for this firm's files.

The terms under which this medal have been awarded are "in all instances made either for some discovery in the arts or sciences or for the invention and improvement of some useful machine or for some process or combination of materials in manufactures or for ingenuity, skill or perfection in workmanship."

IT IS UNTRUE.

We have received a letter from the Kelly Axe Mfg. Co., Alexandria, Ind., in reference to an item in the Anderson (Ind.) Bulletin of Oct. 8, stating that the Kelly Axe Mfg. Co. of Alexandria, Ind., has been absorbed by the American Axe & Tool Co., in which they say: "The article published concerning us is totally untrue. This company has not been absorbed by any other company whatever, nor does it expect to be. It is pursuing its business in the usual manner and expects to continue to do so. This article emanated from the reporter of the Indianapolis News, who lives here and is notorious for his misrepresentations."

ALLEGED CHAINMAKERS COMBINATION.

It is said a combination of chainmakers was formed at Cleveland, O., Oct. 22, which includes the following firms: "James McKay & Co., Pittsburg; Pittsburg Chain Company, Pittsburg; Chilcott-Evans Chain Company, Pittsburg; Union Chain Works, Allegheny, Penn.; Nix Lorff-Krein Manufacturing Company, St. Louis; Columbus Chain Company, Columbus, Ohio; Seneca Chain Company, Kent, Ohio; Woodhouse Chain Company, Trenton, N. J.; Todd-Oben Chain Company, New Albany, Ind.; American Rolling Mill Association, Chicago; Indiana Chain Company, Jeffersonville, Ind.; American Chain Company, Zanesville, Ohio; United States Chain Company, Greenfield, Ind."

BUSINESS CHANGES.

NEW FIRMS.

Algoma, Mich.—Meyer Bros.
Cayuga, Ind.—H. O. Peters.
Grand Island, Neb.—Andy Large.
Canastota, N. Y.—Jacob Schlick.
Amherst Junction, Wis.—Frank Frazer.
Bryan, Tex.—Cole Hardware Co.
Clifton, Pa.—John Fischer.
Hawley, Pa.—William Watts.
Hopkinsville, Ky.—Farmers' Hardware Co.
Martin's Ferry, O.—Fred Dixon.
Minnedosa, Man.—Gunn & Baker.
Portland, Me.—Talbot, Brooks & Ayer.
Prague, O. T.—R. M. Crow.
South Bend, Ind.—Schrader & Hildebrand.
Wichita, Kan.—Cox Bros.
Myrtle Point, Ore.—S. E. Johnson & Co.
Dawson, Minn.—Henry Uglem.
Beaver, Minn.—P. H. Neiheisel, Minn.
Clements, Minn.—Gertsman & Hopfensberger.
Starkweather, N. D.—Thos. E. Morgan.
Lonsdale, Minn.—John Gannon.

Drake, N. D.—Sleigh, Sansbo & Kinstad.
Duluth, Minn.—Charles A. Gustafson.
Union, N. D.—Ole Fausker.
Norwich, N. D.—James Carney.
Jamestown, N. D.—A. H. Klein.
Hanna, Ind.—Charles Wills.
Emington, Ill.—Mr. Whittaker.
Fonda, Ia.—Charles Kennedy.
Ashton, Ill.—Frank Roberts.
Fowler, Ind.—Mr. Hunter.

CHANGES.

Farnhamville, Ia.—W. L. Skinner and W. F. Washburn succeed J. B. Smith.

Mechanicsville, Ia.—Wilson & Carpenter succeed Wilson & Nagel.

Argyle, Minn.—S. B. Sanford and Ben Tronslin succeed Henry Miller.

Washington, Pa.—Joseph A. Little succeeds George Davis.

Olympia, Wash.—H. C. Bilger has retired from the Olympia Hardware Co.

Western, Neb.—M. E. Haight has purchased an interest in the Coggswell Crown Company.

Belgrade, Neb.—Jim Main succeeds David Young.

Humboldt, Ia.—Lonning & Lund succeed Opheim & Lonning.

Havana, Ill.—John Henninger, Jr., and J. Meyer succeed J. E. Meyer.

Chillicothe, O.—Harry T. Kellhofer succeeds Theo. Kellhofer & Son.

Blue Earth, Minn.—Hale & Maxson succeed Bishop & Anderson.

Chillicothe, Mo.—W. H. Archer & Son succeed Hoppe-Taylor Hardware Company.

Clarinda, Ia.—W. C. Fallis succeeds Talland Hardware Company.

Ottawa, Ill.—Fred L. Fischer succeeds John Haeberlin.

Baldwin, Wis.—John Moe succeeds to the implement business of Bril & Johnson.

South Byron, N. Y.—Walter H. Coward succeeds A. J. Waterman.

Alden, Ia.—W. R. Cox succeeds W. B. Miller.

Cape May, N. J.—Chas. A. Swain succeeds J. C. Eldredge & Son.

Downs, Kan.—W. A. Barry succeeds Barry Bros.

Ebensburg, Pa.—Schettig Bros. succeed W. L. Dufton.

Risingsun, O.—Charles E. True and Charles A. Rice purchase controlling interest in Sun Hardware Co.

Gentry, Mo.—Dowling & Grantham succeed Bressler & Hurst.

Hopkinton, Ia.—Milroy & Johnson succeed G. W. Collins.

Hurleyville, N. Y.—Simpson & Mitchell dissolve partnership, Mr. Simpson retiring.

Jonesboro, Ind.—B. M. Harris Hardware Co. succeed West & Mossip Hardware Co.

Lake Preston, S. D.—Olston & Thorsnes succeed Carlson Bros.

Lebanon, Pa.—W. H. Darlington and P. F. Hollenbaugh succeed Edward D. Krall Hardware Co.

Mapleton, Minn.—H. M. Quinn succeeds J. M. Sprague.

Marceline, Mo.—W. E. Parks succeeds Holman Bros.

Martinsburg, Pa.—Jere Brown succeeds Martin Grafius and Jere Brown.

Mounds, I. T.—Hess Bros. succeed Hess & Fruit.

Orofino, Idaho.—Stannus & Olcott have dissolved partnership, Mr. Olcott retiring.

Pittsfield, Mass.—John E. Eells succeeds Eleazer Williams.

Shamokin, Pa.—William Heck and E. D. Sanner succeed Shamokin Hardware Co.

Sioux Center, Ia.—Wesselink & Boeyink succeed Sneller & Wesselink.

Urbana, Ill.—Fred Chenoweth succeeds A. C. Nobles.

Waynesboro, Pa.—Demuth & Englar succeed J. H. Gehr & Son.

Webster, Mass.—Rosebrook & Cummings Co. succeed Cyrus Spaulding.

Woodbine, Ia.—Nickel & McEwen succeed J. A. Boies & Co.

Iona, Minn.—Lentz & Laner succeed Smith & Lentz.

Owatonna, Minn.—Olaf Elton succeeds Elton Bros.

Duluth, Minn.—C. E. Benson succeeds Benson & Gustafson.

Sedan, Minn.—T. J. Rooney succeeds J. P. Rooney.

Ada, Minn.—Charles H. Brown succeeds Myran & Holden.

Berwick, Ia.—A. W. Malley succeeds D. G. Wehde.

Cottonwood, Minn.—John Michie succeeds O. J. Johnson.

Fowler, Ind.—Balch & Ridlen dissolve partnership, Mr. Ridlen retiring.

McPherson, Kan.—Fletcher, Lloyd & Gray succeed Olsen Brothers.

Dunkirk, N. Y.—Skinner & Ottaway succeed Frazer & Skinner.

Quasqueton, Ia.—Ed Mulford succeeds A. P. Burrhus, Sr.

Brookfield, O.—Clyde McMaster succeeds Stewart & Co.

Washington, Pa.—Paul & Post succeed J. D. Bigger.

North Brookfield, Mass.—Summer Holmes succeeds Clarence E. Brown.

Leonardville, Kan.—Lou Bardwell succeeds Mr. Thompson.

Oakhill, Kan.—W. W. Stewart succeeds D. O. Folsom.

Spencer, Ind.—James Layman succeeds T. M. Martin.

Fowler, Ind.—Mr. Hunter succeeds W. T. Key Hardware Company.

Astoria, Ill.—Wm. Nash succeeds J. C. Lutz.

Kirkwood, Ill.—J. H. Campbell & Co. succeed J. H. Campbell.

Urbana, Ill.—R. Homer Ford succeeds Willams-Service Co.

Westfield, Ill.—W. L. Biggs succeeds Spelspring & Son.

Tecumseh, Neb.—McDougal & Bros. succeed McDougal & Smith.

Pittsford, Mich.—F. R. Kedzy succeeds A. A. Case.

Moscow, Wash.—Beveridge & Wilson succeed Lestoe & Gehri.

Tacoma, Wash.—Gehri & Clark succeed A. Gehri.

Downs, Wash.—H. W. Cupple succeeds S. H. Amon.

Carrsville, Ky.—C. E. Kidd succeeds Rhodes & Kidd.

Richmond, Va.—C. & A. Edgar succeed William Gibb & Co.

Columbia, Miss.—W. T. Haney succeeds R. B. Haney.

Russellville, Ark.—The Patrick-Leonard Hardware Co. succeeds Swilling, Patrick & Co.

Llano, Tex.—Conley & Qualls succeed Lewis & Qualls.

Cleveland, Tenn.—Johnston & Tipton dissolve partnership, Mr. Johnston retiring.

Nicholasville, Ky.—Hunter & Simpson succeed Barkley, Arnett & Hunter.

Oskaloosa, Ia.—R. E. Redman succeeds Hamilton & Hamilton.

Sacred Heart, Minn.—John Felska succeeds Ellingboe & Co.

Esmond, S. D.—Ed. Wigton succeeds W. & J. G. Sheets.

Lindsay, Wis.—W. Wiken succeeds the Lindsay Hardware Company.

Lone Rock, Wis.—Beckwith & Flannery succeed C. Beckwith.

Merrillan, Wis.—Purnell & Comstock dissolve partnership, G. W. Purnell continuing the business.

STOPPAGES.

Pekin, Ill.—The store of Carstens & Neuman is closed.

Gravette, Ark.—Leonard & Blevins is reported sold.

Nicholasville, Ky.—Frank Deering has sold out.

Ipswich, S. D.—John L. Smith & Son sold out.

Butler, S. D.—F. Dressel has his business for sale.

Mound City, S. D.—Bugbee & Goss have retired from the hardware business.

Angola, Ind.—Eugene A. Carver has filed a petition in bankruptcy. Liabilities, $8,748.24; assets, $3,632.15.

Dale, Tex.—Walter Aaron Alexander has filed a voluntary petition in bankruptcy. Liabilities, $4,869.34; assets, $2,894.

Louisville, Ky.—J. Adam Zimmerman has assigned to George L. Martin.

Clarkston, Wash.—W. S. Jennings has filed a petition in bankruptcy.

Heating and Ventilating.

J. B. Paine, M. Gregory and Constant Delang are the incorporators of the Griffiths & Quinn Co., Chicago, capitalized at $15,000, for dealing in plumbers', steam and gas fitters' supplies.

W. H. Burnett, superintendent of the heating department of the Stambaugh & Thompson Co., Youngstown, O., left that firm on Oct. 8th to embark in the same line of business in that city.

The Bowling Green Gas Light Co., of Paducah, Ky., have let the contract for the construction of a $70,000 steam heating plant, which will have a heating capacity of 150,000 square feet radiation.

James Bartlett, C. H. North, G. C. Steele and F. W. Hill are the incorporators of the Bartlett Bros. Co., Cleveland, O., capitalized at $50,000, for the manufacture of heating and ventilating apparatus.

The Buffalo (N. Y.) steamfitters have adjusted their wage dispute with the master steam and hot water fitters of that city by arranging for a wage scale of $3.25 a day until April 1, 1903, when the wage scale will be made $3.50 a day until April 1, 1904.

The S. Wilks Mfg. Co., Chicago, will shortly erect a new building, 150x175 feet in dimensions, and two stories in height, at the corner of Thirty-fifth street and Shields avenue, Chicago. They expect to have these new quarters of theirs ready for occupancy by Jan. 1.

The Utica Heater Co., Utica, N. Y., with Chicago office at 33 Dearborn street, and New York office at 106 Beekman street, are proud of the superior construction of their furnaces. The features of this include the large one-piece cast radiator, the new labor saving duplex grate and the high ornamental front, the large two-piece fire pot, the heavy food dome and the strong ash pit section.

WILL PLAY GOLF MONDAY.

The Western Trade Golf Association will hold their second annual tournament on the grounds of the Hinsdale Golf Club, Hinsdale, Ill., on Oct. 27.

A splendid list of prizes has been offered, as follows:

The first flight—The Club Challenge Cup, won for the first time and now held by Capt. S. O. Dugger. To be won twice in succession before permanent ownership. To be given for the best score of 18 holes.

The second flight—Cup presented by the American Radiator Co. of Chicago.

The third flight—Cup presented by Jas. B. Clow & Sons of Chicago.

The fourth flight—Cup presented by Rundle-Spence Mfg. Co. and Hoffman & Billings Co. of Milwaukee, jointly.

Prizes have been offered for the runners up in each class as follows:

The A. Y. McDonald & Morrison Mfg. Co. of Dubuque have donated a handsome cup for the runner-up of the first flight.

The N. O. Nelson Mfg. Co. of St. Louis will give a cup to the runner-up of the second flight.

Kellogg-Mackay-Cameron Co. of Chicago have offered a handsome golf bag to be given to the runner-up of the third flight.

E. W. Blatchford & Co. of Chicago contribute a beautiful stick-pin, which will be given to the runner-up in the fourth flight.

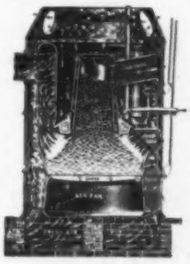
It is expected that an attempt will be made to wrest from Charles K. Foster the handsome bronze trophy presented by W. A. Russell & Co. for the best medal play. Mr. Foster won this trophy at the recent tournament of the Eastern Trade Golf Association. It will become the property of the man who succeeds in winning it three times in toto, successive winnings not being required.

The date of the tournament is very convenient for members of the Central Supply Association, who will have to reach Chicago only one day in advance of the meeting of that association announced for Oct. 28. It is hoped that many will avail themselves of the opportunity because of this convenient arrangement.

SOFT COAL BASE BURNING FURNACES.

The Bryce Furnace Co., 918 Summit St., Toledo, O., are manufacturers of the Bryce furnaces and heaters, which are self-feeding base burners for soft coal and are equally adapted for hard coal or coke.

As soon as the fire is fairly started in the furnace, the lower register may be closed and the draft taken in at the feed door. Being then drawn across above the fuel in the magazine, this draft collects in its passage all the gases and smoke which may have arisen through the same, and mingled with these, passes down between the double shells of the magazine, becoming in so doing itself thoroughly heated, and being in this condition, spread in a thin sheet directly between the glowing coals in the fire-bowl, and the only outlet through which the gases from them can reach the smoke flue, it insures thorough mixture with them, and the almost perfect combustion of all the heat-producing elements of the fuel, it is claimed.



Sectional View of Combination Furnace.

The first flash of this combustion occurs in the bowl of the furnace just below the dome, but it is continued along up through the radiator, thus bringing the entire body of the furnace into direct contact with the fire. To secure the full benefit of the heat thus generated, a deflecting plate is placed in the radiator. The flaming gases entering this from below are divided into two streams, which, sweeping in opposite directions around through the annular spaces of this radiator, meet at smoke outlet and pass on up the chimney.

Advertising Department.

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The artistic character of the advertisement of the Shannon Hardware Co., Philadelphia, has been praised in this column heretofore. By the use of long, narrow cuts they make single-column spaces very attractive.

Food chopper

You will never go back to the old-fashioned bowl and knife, after you once use a modern food chopper.

Simply clamp it to the edge of table and turn the crank.

Chops a pound a minute—raw or cooked meat, vegetables, fruit, crackers, bread, eggs, cheese, nuts, etc.

Price for the best, 95c.

Krout Cutters, 25c for small, up to **$4.00** for big ones.

Apple Parers, Raisin Seeders, Slicers—best kinds at lowest prices.

Write for book of household helps.

Shannon, Hardware 1020 Market

Their advertisement of a food chopper shown herewith is quite excellent, as it is certain to set housewives who read it thinking over the advantages of a food chopper.

All mankind loves a lover, said Emerson, and the interest in engagements made and broken is universal. The Wm. Miller Range & Furnace Co., Cincinnati,

Engagement Announced

They will occupy the same house—one to cook and the other to cool. A Miller Gas Range and a Miller Refrigerator.

WM. MILLER RANGE & FURNACE CO., Post-Office Square.

Ohio, take advantage of this feeling to get up a very effective headline for a small and cleverly worded advertisement, which should prove a distinct boon to the trade handling their goods. This little advertisement starts out with the heading "Engagement Announced" in heavy type, and continues, "They will occupy the same house—one to cook and the other to cool—a Miller gas range and a Miller refrigerator.

The Aeolipyle Co. are doing some striking advertising in the daily press, a reduction of one of their 13x7 inch ads. in the New York Herald being shown herewith. The different uses of this contrivance are

cunningly set forth. Personally, we do not favor the skeleton type, which use is compulsory by advertisers in many of the largest papers. We believe this advertisement would be much more striking if the principal display lines appeared in Plymouth or Gothic.

EVERYTHING YOU NEED TO KNOW ABOUT BUSINESS.

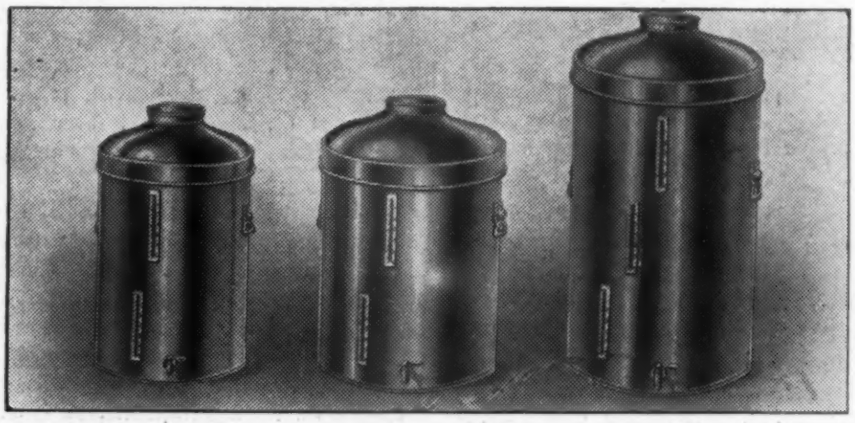
Popular Mechanics, Chicago, of Oct. 18th, says: "Everything you need know about business, that business references can tell, is given in a recent manual issued by THE AMERICAN ARTISAN. It is entitled 'The Manual of Business,' and is intended as a reference book for retail merchants. There is probably no person in any walk of life, however, that would not find much information of value to him in this handy volume. The manual is compiled by Sidney P. Johnston and Daniel Stern, 69 Dearborn street, Chicago, is publisher."

Tinshop.

NATIONAL CREAM SEPARATOR.

The accompanying illustration shows the National Cream Separator manufactured by the National Enameling & Stamping Co., with offices in New York, Baltimore, Chicago, Milwaukee, St. Louis and New Orleans.

This separator has improved retinned, stamped, reversible cover and strainer with 4¾-inch brass strainer cloth, drawn from one sheet of metal without any seams or grooves for dirt to accumulate, heavy retinned steel hoops on bottom and top of body, improved retinned malleable drop handles and stamped tapering bottoms, the latter designed to prevent the whirlpool action in drawing off the cream.



National Cream Separator.

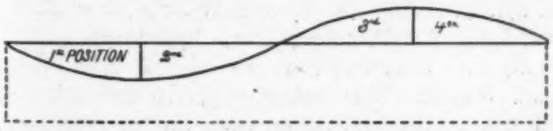
This separator is made in 10, 15 and 20 gallon sizes.

METHOD OF CUTTING ELBOW PATTERN.

To The American Artisan.

I send you herewith my method for cutting an elbow pattern. I first find one-fourth the circumference of the desired elbow, which I then divide into four equal parts.

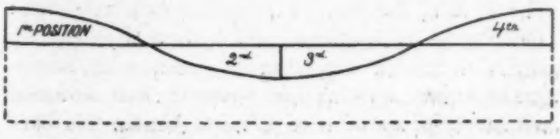
In the diagram let line a b equal one-fourth the circumference, which in this case is 5½ inches, the



circumference being 22 inches and the desired elbow a 7-inch.

Then divide a b into four equal parts, a c, C D, D E and E B, as stated above.

Setting the compass at a as center and a c as radius, make the quadrant C F.



Divide the quadrant into four equal parts.

Set off from points c, d and e, respectively, the distances of each of the three points, g, h and i, from the line a, b. Now draw a free line from point f through these points to b.

This completes the pattern and is all the guide necessary to make a perfect elbow.

The above is for a three-piece elbow, but if a four-piece is desired make a, f equal to one-fifth of a, b, instead of one-fourth, and a four-piece will be the result.

My method of using the pattern is to draw a straight line across the material to be cut far enough from the edge to allow for the rise and mark out as below.

Charles W. Dickson.

Fayette, Iowa, Oct. 21, 1902.

WORKERS MAKE COUNTER PROPOSITION.

The vote of the special convention of the Amalgamated Association of Iron, Steel and Tin Plate Workers on the proposition to concede a 25 per cent reduction in wages on an order of 1,500,000 boxes of tinplate for the Standard Oil Co., so that this order, now made in Wales, can be produced in this country, is awaited with a great deal of interest on account of its effect on the general market. The proposition made by the American Tin Plate Company to the tin workers of the Amalgamated Association, which has been under discussion for the past five or six months, has been met with a counter proposition, which was made Oct. 23 by the delegates in special convention at the Hotel Moorhead, Pittsburg. The counter proposition provides for a general reduction of wages of 3 per cent. The proposition of the company was that the men should work up the orders to fill the drawback trade at a rate of 25 per cent below the regular rate of wages. It is said that the American Tinplate Company will accept the counter proposition.

The impression is now growing that, whether the rebate proposition or this reduction in wages goes through or not, there will be no reduction in the price of tinplate. A month or two ago the view was general in the trade that there was going to be a reduction, in order to shut out the present and prospective independent mills. Since then a number of projects have been dropped, and it is not now believed that any more independent tin mills will be built, as the public has become convinced that it would be a waste of money to build any more.

NOTES AND QUERIES.

BOOK ON SAFETY OF GASOLENE STOVES.

From L. S. R., Union Junction, O.

Where can I get a book devoted to proving the safety and utility of gasolene stoves?

Ans.—Daniel Stern, 69 Dearborn street, Chicago, published a pamphlet entitled "Safety and Utility of Gasolene Stoves" some years ago.

GAS FIRE POTS.

From Elliott Mfg. Co., Warren, Ill.

Where can we buy gas fire pots?

Ans.—Burgess Soldering Furnace Co., Columbus, O.; Clark Novelty Co., Rochester, N. Y.

ITEMS.

Mr. Keating retires from the tinsmithing firm of Smith, Keating & Co., East Jaffrey, N. H.

The Encaustic Metal Co., McKeesport, Pa., manufacturers of metal ceilings, had their plant visited by fire last week.

H. J. Lampert, H. W. Kellermeier and O. F. Stifel are the incorporators of the H. J. Lampert Can Co., St. Louis, Mo., capitalized at $15,000.

E. A. Batton is one of the incorporators of the Clarksburg Galvanized Iron Working Co., Clarksburg, W. Va., capitalized at $20,000.

It is said that J. R. Davis, of Pittsburg, Pa., is interested in a new tin mill which will be erected at a cost of $100,000, at Clarksburg, W. Va.

Adolph Tischler, Joseph Jacobson and Max Tischler are the incorporators of the Manhattan Tin Roofing Co., New York city, capitalized at $10,000.

It is stated that additions are being made to the plant of the American Tin Plate Co. at Elwood, Ind., which in the next two years will make it the largest in the world.

The Ludowici Roofing Tile Co., Chicago. have purchased a thousand acres of clay land, and will establish a plant for the manufacture of roofing tile at Liberty City, Ga.

McClure & Co., Pittsburg, Pa., have invented a new process for making terne plates which enables them to give these plates a more even coating, and also to give them a uniform thickness.

The firm of Fowler & Locke, 81 Fulton street, New York city, manufacturers' agents for copper and brass goods and stamped ware, was dissolved by mutual agreement on Oct. 13 and is succeeded by William E. Locke.

M Schrayers Sons & Co., 49 Blue Island avenue, Chicago, make a complete line of wash boilers, 35 styles in all, as well as a full line of dairy flaring covered and galvanized pails, tea kettles, dinner pails, japanned fire shovels and cobbler's outfits.

The Pacific Tinplate Co. was recently incorporated at Beadle, S. D. It is capitalized at $300,000 and the plant will be located ten miles from Los Angeles, Cal. The citizens of that city have guaranteed a bonus of $75,000 for the location of the factory. The directors of the company are as follows: President, Joseph Beaver, Gas City, Ind.; vice-presidents, George Bluett and Benjamin Clarke, Gas City, Ind.; secretary, N. J. Coppock, Jonesboro, Ind.; treasurer, James Eltun, Gas City, Ind.

The Elliott Mfg. Co., Warren, Ill., tinware manufacturers, are very proud of a record they made recently. They have been delayed in receiving lumber, but recently a car load of lumber was drawn on the side track, and within five minutes a box of tin ware was being packed, this lumber being used in making the box.

The Dominion Canister Company, Ltd., have bought the business of the Canada Can Company, Dundas, Ont., and are moving from the present quarters into more commodious ones. They are arranging their machinery to double the output, so they will have a capacity of between six and seven million cans per annum. They will be ready to start business in the new factory about October 20.

Bertsch & Co., Cambridge City, Ind., are manufacturers of improved gap squaring shears (treadle or lever combined) or belt power for light or heavy work, all sizes for squaring, trimming and slitting, also cutting triangular or square holes, made in eight different styles. Their improved combined punch and shears is made in twelve sizes, 10 to 18 inch blades, and is also arranged for cutting triangular or square holes.

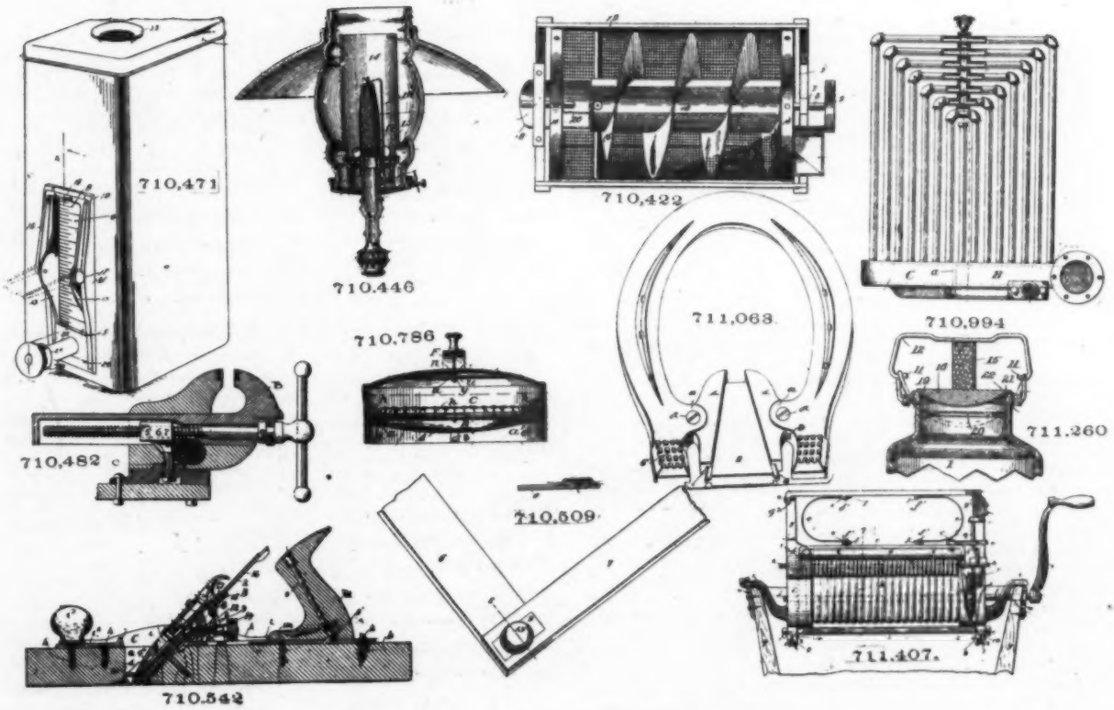
The Reed Mfg. Co., Newark, N. Y., send us their twelfth catalogue of anti-rusting tinware, which includes anti-rust milk pails, anti-rust strainer pails, anti-rust creamery pails, anti-rust dippers, anti-rust cups, anti-rust measures, anti-rust milk cans, anti-rust preserving kettles and anti-rust wash boilers. One of these interesting volumes will be forwarded dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

McClure & Co., tin plate manufacturers, 211-215 Second avenue, Pittsburg, Pa.; 115 North Seventh street, Philadelphia, Pa., and Washington, Pa., are sending the trade some neat blotters which call attention to the fact that their big warehouses and mills enable them to carry in stock and ship promptly a complete line of roofing and bright plates, black and galvanized sheets, all gauges and widths; black and galvanized corrugated roofing, black and galvanized V crimped roofing, galvanized conductor pipe, black and galvanized roll steel roofing, Wood's patent planished iron, Wood's refined iron, galvanized eave trough, eave trough hangers, elbows and shoes, conductor fasteners, wire, bright, coppered and galvanized, wire roofing and slating nails, tinners' tools and machines, Tuttle & Bailey registers, roofing and furnace cement, sheet copper, soldering coppers, solder, pig tin, rivets, dampers, sheet zinc, ridge roll, roofing paint, roofing paper and asbestos paper.

A COLLECTION OF CORRECT BUSINESS FORMS

The Reform Advocate, Chicago, of Oct. 11 writes: "The Manual of Business" is a collection of correct business forms for executing all commercial instruments; commercial data and advice on the thousand and one questions of correct methods that are constantly arising in every-day business life, written by Sidney P. Johnston and published by Daniel Stern, 69 Dearborn street, Chicago."

NEW PATENTS.



710,839—Non-interfering horseshoe. Jefferson T. Broach, Churchland, Va.

710,786—Broiler, etc. Edwin A. Leland, Great Barrington, Mass.

710,542—Bench plane. Justus A. Traut, New Britain, Conn.

710,509—Square. John Phillips, Chicago, Ill.

710,482—Bench vise. John R. Long, Warren, Pa.

710,471—Cream separator. Gideon Klay, Bluffton, Ohio.

710,446—Incandescent gas lamp. Louis D. Frenot and Alexandre Gimonet, Newark, N. J.

710,994—Heater-section or radiator. Chas. H. Palmer and Carl A. Carlson, Baberton, Ohio.

711,407—Washing machine. Horatio J. Lockhart, Fostoria, Ohio.

711,063—Horseshoe. Walter B. Merck, Ocala, Fla.

711,206—Fruit jar. Dora Ray, Tarentum, Pa.

KEEP THE DOLLAR ON THE MOVE.

Here is a simple problem in multiplication:

If you invest a certain amount of money in a hammer, and then sell it at an advance of 15 cents, you have made 15 cents.

If you use the same money for the purchase of another hammer, and make four such deals in a year, you have cleared 60 cents.

If you have $10,000 in your business and are able to turn it over four times a year, you are on the same level as the man who has $40,000 and turns it over once a year.

If the above doesn't carry its own moral, then there is no moral to be made out of it.

That is a great question in selling goods: To sell the goods, and get the money out of them; to have that money to put back into other goods, to sell again.

If you have a dollar locked up in some old slow-coach of an article, go at it with all your might, and get that dollar out. Then speed it forth after something else that will move livelier; keep it at work, make it earn something all the time.—Hardware Hints.

A LIKELY PLACE.

Church—You know French, who keeps the restaurant?

Gotham—O, yes.

"Well, he wants a new typewriter."

"What's the matter with that good looking one he had?"

"O, the other day he told her to write and get the price of frogs' legs, and she addressed the letter to the Hop Growers' Association."—Yonkers Statesman.

A HOT SHOT.

A city clockmaker has placed the following notice in his window: "The misguided creature who removed the thermometer from this door had better return it, as it will be of no use where he is going, as it only registers 125 degrees."—Ex.

PAY AS YOU GO

To pay as you go is the very best way,
Avoiding annoyance and sorrow.
You'll find it is better to pay to-day
Than be forced to pay up to-morrow. —Ex.

IN THE ZOO HOSPITAL.

A giraffe in a foreign zoo, suffering from a sore throat, has been wearing no less than thirty yards of red flannel wound around its neck.

The only conceivable thing in nature worse than a giraffe with tonsilitis is a centipede with chilblains.—Ex.

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Canton Steel Roofing Co..... 46
Ferrosteel Co..... 14
Garry Iron & Steel Roofing Co.... 46
Gerock Bros. Mfg. Co..... 48
Globe Ventilator Co..... 60
Henry & Scheible Co..... 14
Iwan Bros..... 59
Milwaukee Corrugating Co..... 48

Washing Machines.
Brammer, H. F. Mfg. Co..... 56
Clark, Quien & Morse..... 50

POWER IN POUND OF COAL.

"A pound of coal can produce power sufficient to pull a large express train a distance of one-sixth a mile, going at the rate of fifty miles an hour," said an experienced locomotive engineer.

"You would be surprised," he continued, "at the wonderful amount of work which the energy from this small quantity of coal can do. For the purpose of explaining take, for instance, a pound of what might be called average coal, containing about 10,000 heat units. This would be somewhat smaller in size than a man's fist. If this pound of coal should be burned completely and entirely under water and all of its heat should go into the water a temperature of 625 pounds of water could be raised to the height of one foot.

"If this pound of coal could be completely burned in water one foot deep, with a temperature of 64 degrees, and all the heat from this coal be imparted in the water, this water would become 16 degrees hotter, thus being suitable for a comfortable bath. If adapted to mechanical work, the 10,000 heat units in the one pound of coal would be equivalent to 236 horse power. The 236 horse power of potential energy contained in the pound of coal is enough to haul a train of eight cars for a period of one-fifth of a minute, or a distance of one-sixth of a mile, going at the rate of fifty miles an hour. It has also been found to be able to draw a cable train, including the grip car and trailer, for a distance of two miles at the rate of nine miles an hour. It would also be of sufficient power to pull an electric car well filled with passengers for two miles and a half at the rate of ten miles an hour.

"If the power in this pound of coal is compared with the work of a strong man used to hard labor, it would be found that there is more than sufficient power in the pound of coal to do in one minute the day's work of eight hours of five strong men. This is accounted for in this way: The work of a strong man, used to hard work, is estimated as being equal to one-tenth of a horse power. The eight hours he works is equivalent to 480 minutes. Naturally, while working, a man makes a number of stops, either to rest or change the monotony of his position. These stops, then, would, without difficulty, take up one-tenth of the man's time. Thus this would reduce the time of actual work down to 432 minutes. This time, at one-tenth of the horse power, makes the total of his day's labor amount to 43.2 horse power. At this rate it is shown that it would take 2,600 strong men, working constantly, to do jointly the same amount of work in one minute as can be done by the single pound of coal.

"Another line of work in which the superiority of a pound of coal is shown beside the labor of a man is that of sawing wood. A man may consider himself a swift sawyer by making sixty strokes a minute, each stroke of the blade having progressed five feet a minute, but a circular saw, driven by machinery, may be put through seventy times that distance and saw seventy times as much wood. Still, this little pound of coal has the power to keep in operation 180 such saws."—Baltimore American.

DIRECTIONS FOR THE GROCER.

Little Alice had no objections to going on an errand for her mother if she could pronounce the name of the article wanted. She dreaded the laugh which usually followed some of her attempts at a hard word. "Vinegar" was one of the most difficult, and her mother never sent her for this if she could get it any other way. One day, however, Alice was obliged to go. Entering the store, and giving the jug to the grocer, she said: "Smell the jug, and give me a quart!"—*Exchange.*

Trade Report.

CHICAGO IRON MARKET.

The starting of the mines in Pennsylvania and Alabama has had a wholesome effect on the local market. The market is easy and quiet.

Several local furnaces that were banked on several weeks ago have again resumed operations. Reports from Tennessee announce the resumption of business by furnaces.

A shortage in the pig iron market may again be looked for before the 1st of January, on account of the inability of the railroad companies to furnish enough cars.

The importation of foreign iron will practically cease; what material contracted for will be delivered. Owing to the fact that foreign call has been imported, iron importers could not secure transportation facilities.

Spot is in good demand. Prices vary, but where prompt delivery is assured a strong price on pig iron is maintained.

BLACKSMITHS' MATERIAL.

Blacksmiths' materials are in quiet request at steady prices. We quote: Horseshoes, $4.25; horseshoe nails, No. 8, 14c; calking steel, 3¼@3½c; toe calks, dull, 4½@5c; sharp, 5@5½c; rubber horseshoe pads, 80c@$1.40 per pair; bar iron and steel, 2.20 @2.40c; Midvale steel, 8c, 12c and 16c for B, Bs and sBs brands; self-hardening steel, 40@45c.

COPPER.

The market is considerably unsettled. An effort was made to raise prices, but met with little success as consumers were able to purchase copper at the usual low prices from a number of principal dealers. Consuming inquiries are fairly large, though actual business closed is of little volume. We quote: Lake, round lots, 11.50 @11.65c; electrolytic, 11.40@11.50c; casting, 11.35@ 11.45c. London was cabled easy: Standard copper, closing spot, £52 11s 3d; sales, 350 tons; futures, £52 13s 9d; sales, 450 tons.

MANUFACTURED COPPER.

Manufactured copper is unchanged at 17@18c for sheets; bars, 17@17.50.

SPELTER.

Spelter is in quiet request, the market has a fine tone. We quote: Round lots, New York, 5.50c; jobbing, ¼@½c more; sheet zinc, cask lots, 6½@6¾c; small lots, 7¼@7½c. St. Louis market is quoted at 5.10@5.20c; London, £19 2s 6d.

ANTIMONY.

The market is dull. We quote: Cookson's, 9½@ 9¾c; Hallett's, 7¾@8c; United States Star and other brands, 7¼@7¾c.

NICKEL.

Nickel at present is quoted from 40 to 47 cents per pound for large quantities down to ton lots, according to size and terms of order, the price for smaller lots according to quantity, running as high as 60 cents per lb.

QUICKSILVER.

The New York price continues $48 per flask for large orders, with a slightly higher figure for small lots. In San Francisco prices are steady, and the quotation is $45.50 to $46.50 per flask for domestic orders. For export orders $44 per flask is quoted. The London price remains £8 15s per flask, with the same figure quoted from second hands.

PLATINUM.

Market is $19 per oz. in New York. London prices are about on a parity with our market.

DRIPPING PANS.

Discount of 60 and 5 per cent is quoted on dripping pans.

PUMP CHAINS.

Price is lowered slightly on pump chains, $4.25 per 100 pounds now being the price quoted.

ZINC.

Zinc prices are quoted by the jobbers as follows: 600 lb casks, $7.10 per 100 lbs; 300 lb casks, $7.30 per 100 lbs. Sheets, $7.50 per 100 lbs.

LINSEED OIL.

Prices continue to drop and linseed oil is now quoted at 25 per cent lower than a month ago. Prices today are strictly pure, raw, 43c per gal; strictly pure, boiled, 44c per gal.

CONDUCTOR PIPE.

Prices have been reduced on conductor pipe. Discounts quoted to-day on vested are as follows: Eastern, 75 and 7½ per cent; Central, 75 and 2½ per cent; Southwestern, 65, 10 and 10 per cent; Missouri River, 75 and 2½ per cent; Southern, 70 and 7½ per cent. Not vested, Eastern, 75 and 2½ per cent; Central, 70 and 12½ per cent; Southwestern, 65, 10 and 5 per cent; Missouri River, 70 and 12½ per cent; Southern, 70 and 2½ per cent.

CHISELS.

Good quality cold chisels are quoted at from 12 to 20c per pound.

PIPE CUTTERS.

Stemwood pipe cutters are quoted at about 10 per

cent higher than has been asked for some time. No. 1, 85c each; No. 2, $1.50 each, and No. 3, $4 each.

GLASS.

The prices on glass are unchanged. We quote: Single, 89 and 5 per cent off; doublt, 89 and 10 per cent off; plate, 80 per cent off.

WRENCHES.

A discount of 75 per cent is quoted on Gerard Agricultural wrenches.

BRIGHT WROUGHT STEEL BUTTS.

Prices quoted to-day are as follows: Nos. 800, 804, 808, 810, 814, 834, discount 70, 10 and 5 per cent; Nos. 838, 840, 842, discount 75 and 5 per cent; Nos. 822, 823, discount 80, 10 and 5 per cent.

EAVE TROUGHS.

The following discounts are announced on eave troughs: Eastern, 80 and 7½ per cent; Central, 80 and 2½ per cent; Southwestern, 75, 10 and 2½ per cent; Missouri River, 80 and 2½ per cent; Southern, 75, 10 and 5 per cent.

TIN.

Tin is unsettled. After an advance prices dropped. Business was light after the drop in prices. Buyers are always reluctant to buy on easier prices after a rapid and quick advance. We quote: New York, round lots, spot, 25.30@25.50c; futures, 24.75@25c; jobbing, ¼@½c more. London was last cabled firm at £116 17s 6d for spot, and £115 17s 6d for futures.

TIN PLATES.

Tin prices are unchanged. Business is light owing to the fact that the American Tin Plate Company may lower prices for delivery after December 1. If the American Tin Plate Company would announce what the price is to be for the quarter beginning December 1, there would immediately be a return to normal conditions, and buyers would feel safe to act, both on tin plates and their manufactured products. We quote: Melyn, $6.50@7; Alloway, $5.75@6.25; coke, $4.87½@6.50; terns, $5.25@8; additional X, $1.50@1.75 more.

LEAD.

Lead is quiet and unchanged. We quote: Round lots, New York, 4.12½@4.15c; jobbing, ¼@½c more. London, £10 13s 9d; St. Louis dull at 4@4.02½c. Manufactured: Pipe, 6½c; sheet, 7½c; tin pipe, 50c; tin-lined pipe, 12½c; old lead, in exchange, 3¾c; tee, 3¼c.

BARS.

New business is not active, specifications show a decided improvement, however. Several moderately large orders were placed during the week. The demand for steel bars is good. We quote, Chicago delivery: Mill shipment, Bessemer steel, 1.75c to 1.85c; angles, less than 3x3, 1.85c to 1.95c, base; iron, 1.95c; hoops, 2.15c. Prices out of store, steel, 2c to 2.10c; iron, 2.20c to 2.25c; hoops, 2.40c to 2.50c; angles, 2.50c to 2.60c.

RAILS AND TRACK SUPPLIES.

Sales during the past week in heavy rails aggregated 20,000 tons. Local manufactures of track supplies are taking numerous orders for 1903 delivery. The demand for light rails is good. We quote standard sections, $28; second quality, $27; light rails, 45 pounds, $34 to $35; 12 pounds, $40 to $41; with regular differentials for intermediate sizes; light rails out of store, $45 to $50; track supplies, mill shipments, as follows: Angle bars for standard rails, 1.90c to 2c; spikes, first quality, 2.50c; second quality, 2.25c; track bolts, 3½x¾, with square nuts, 2.85c to 3.00c; per 100 pounds; with hexagon nuts, 3.05c to 3.20c, with usual differentials for other sizes.

MERCHANT STEEL.

The orders now on file are keeping manufacturers running to full capacity and no new business is being solicited. We quote, mill shipments: Spring steel, 2.65c to 2.75c; sleigh shoe, 1.95c, flat sizes; concave and convex, 2c; out of store, 2.15c; cutter shoe, 2.50c to 2.60c; machinery steel, 2.15c to 2.25c, base; plow steel, 2.50c and upwards, according to quality; toe calk, 2.25c to 2.35c; out of stock, 3c to 3.10c; ordinary tool steel, 6c to 7c; specials, 13c and upwards; less than carload lots, 5 per cent to 10 per cent higher; cold rolled shafting, carload lots, 47 per cent off, Chicago; less than carload lots, 42 per cent off, Chicago.

SOME OBITUARIES.

Shed a tear for Mary Doyle—
She dropped a match in a barrel of oil.

—

Our Mariar Jane is missin'—
Skipped into the Silent Hence.
Lit the kitchen fire with naphtha—
An' she hasn't benzine sence.

—

Stranger, pause and drop a tear,
Though there's naught of John Jones buried here.
To a better world he took his flight,
For he thawed out a stick of dynamite.

—Tengwell Talk.

PAPA'S JOKE.

"I think it is so silly to see a baby biting his toes," remarked the young mother.

"Well, I don't," spoke up the young father. "It shows that he is already learning how to be thrifty."

"Thrifty?"

"Yes; isn't he making both ends meet?"—*Chicago News.*

WAS NOT PLEASED.

The teacher of a class in a certain school had been carefully explaining the parable of the prodigal son, and was now testing their knowledge of it. All went well until she came toward the close, when she asked: "Now, tell me, who was not pleased to see the prodigal son when he came home again?" To her consternation she received the following reply from a youthful scholar: "Please, ma'am, the fatted calf."—Chicago Journal.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$11 25
IC	14x20	7 50
IX	14x20	9 00
IXX	14x20	10 50
IXXX	14x20	12 00
IXXXX	14x20	13 50
IC	20x28	15 00
IX	20x28	18 00
IXX	20x28	21 00

COKE PLATES.

Cokes, 180 lbs	IC	20x28	9 50
Cokes, 200 lbs	IC	20x28	9 75
Cokes, 216 lbs	IC	20x28	10 25
Cokes, 216 lbs	IX	20x28	11 75

PIG IRON.

Lake Sup. Charcoal	$25 00@$26 00
Local Coke Fdy No. 1	23 50@ 24 00
Local Coke Fdy No. 2	23 00@ 23 50
Local Coke Fdy No. 3	22 50@ 23 00
Local Scotch Fdy No. 1	24 00@ 24 50
Southern Coke No. 1	23 65@ 24 15
Southern Coke No. 2	23 15@ 24 40
Southern Coke No. 3	22 65@ 22 90
Southern Coke No. 4	22 16@ 22 40
Southern No. 1 Soft	23 50@ 24 00
Southern No. 2 Soft	22 50@ 23 00
Southern Gray Forge	21 15@ 21 65
Southern Silveries	23 50@ 24 00
Jackson Co. Silveries	31 00@ 32 00
Ohio Strong Softeners	27 00@ 27 60
Alabama Car Wheel	26 65@ 27 65
Malleable Bessemer	23 00@ 23 50

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$3 00
No. 18-20	per 100 lbs.	3 10
No. 22-24	per 100 lbs.	3 20
No. 25-26	per 100 lbs.	3 30
No. 27	per 100 lbs.	3 40
No. 28	per 100 lbs.	3 50
No. 29	per 100 lbs.	3 65

SMOOTH STEEL.

Wood's Smooth	No. 15-17	3 20
" "	No. 18	3 30
" "	No. 20	3 40
" "	No. 22-24	3 50
" "	No. 25-26	3 55
" "	No. 27	3 70
" "	No. 28	3 80

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON

	Per 100 lbs.
26 Ga.—24, 26, 28 and 30 in. x 8 ft.	$4 40
26 Ga.—36 in. x 8 ft.	4 70
27 Ga.—24, 26, 28 and 30 in. x 8 ft.	4 70
27 Ga.—36 in. x 8ft.	5 00
28 Ga.—24, 28 and 30 in. x 8 ft.	5 00
28 Ga.—36 in. x 8 ft.	5 35

HOOP IRON.

¾x22	¾x20	⅞x20
$3 20 100lbs.	$3 10 100lbs.	$3 00 100lbs.
1x20	1¼x19	1½x19
$2 90 100lbs.	$2 85 100lbs.	$2 75 100lbs.

PAINTED CORRUGATED IRON.

8-ft. sheets, 2½x28 Ga. ... per sq., $2 60

SOLDER.

XXX Guaranteed ½&½ . per lb.	19¾c
Commercial ½&½ . per lb.	18¾c
No. 1	14¾c

SHEET ZINC.

600 lb. Casks ... base, per lb. 6¾c

COPPER.

Copper ... base, 20c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
	5½@¾c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES.

Carpenters'.
Ajax ... 50%
Blood's ... 40&5%
Hunt's ... 25%
White's ... 12½%
Coopers'.
Barton's ... 20%
White's ... 20%
Ship.
Ajax ... 50%
Blood's ... 40&5%
Hunt's ... 25%
White's ... 12½%

AMMUNITION.

Caps, Percussion—per 1,000.
F L Waterproof, 1-10s ... 50c
G D ... 35c
Eley's ... 52c
Cartridges.
Peters Rim Fire Ctgs ... 50&3%
Peters Cent Fire, Pistol & Rifle 25&3%
Peters Cent Fire, Military and Sporting Ctgs ... 15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.
Peters Blank Ctgs. 22 cal. ... $1 18
Peters Blank Ctgs. 32 cal., C. F. .. 4 40
Peters B B Caps, Round ball ... $1 44
Peters B B Caps, Conical ball ... $1 85
U. M. C. Rim Fire Ctgs ... 50&3%
U. M. C. Cent. Fire, Pistol & Rifl 25&3%
Winchester Cent. Fire, Military and Sporting Ctgs ... 15&8%
U. M. C. B B Caps, Round Ball ... $1 75..18%
U. M. C. B B Caps, Con. Ball. $1 85 net
U. M. C. Rim Fire Shot Ctgs. 50&15&3%
U. M. C. Cent. " " " 25&10&3%
Primers.
Berdan Primers ... $1 00
Peters Primers ... 1 20
U. M. C. Primers ... 1 20
Winchester Primers ... 1 20
Shells.
Peters Empty Paper Shells, 10 and 12 gauge. League ... 25&2%
Peters Empty Paper Shells, 16 gauge. League ... 20&2%
Peters New Victor Nitro Shls .. 20&2%
Ideal ... 25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless. 40&6%
Peters New Victor Loaded Shells, with King's Smokeless ... 40&10&1%
Ideals Loaded with King's Smokeless ... 40&10&10&6%
U. M. C. New Club, 16 gauge ... 20&2%
U. M. C. New Club ... 25&2%
U. M. C. Nitro ... 20&2%
U. M. C. High Base ... 20&2%
Winchester Blue Rivals ... } 20&2%
Winchester Yellow Rivals ... }
Winchester Repeater ... 20&2%
Winchester Leader ... 25&7%
U. M. C. Loaded Shells, Black Powder ... } 40&6% full cases
Winchester Loaded Shells, Black Powder ... }
U. M. C. ... } Smokeless 40&10&10&6% full cases
Winchester ... }
Gun Wads—per 1,000.
Peters Gun Wads ... 18%
U. M. C. Gun Wads ... 18%
Powder.
King's Quickshot Powder; Kegs $4.00; ½ kegs $2.25; ¼ kegs $1.25.
King's Semi-Smokeless, new list. 10%
King's Smokeless, new list ... 10%
Austin Quickshot Powder, Kegs $4.00; ½ kegs $2.25; ¼ kegs $1.25.
Dupont Smokeless, Sporting, 25, ... 20, 10&10%
Shot.
Dropshot, sizes smaller than B, 25-lb. bags, per bag ... $1 30
Drop shot, B and larger sizes, 25-lb. bags, per bag ... 1 55
Buck Shot, 25-lb. bags, per bag .. 1 55
Chilled Shot, 25-lb. bags, per bag. 1 55

ANVILS.

Trenton, 70 to 80 lbs ... 9¾c per lb
Trenton, 81 to 150 lbs ... 9c per lb

AUGERS.

Boring Machine ... 65&10%
Carpenters' Nut ... 65&10%
Hollow:
Ives' New Pattern ... 25%
Bonney's—list $30.00 ... doz. 65&10%
Stearn's, No. 1 ... doz. $42 00
Stearn's. No. 3 ... " 33 50
Post Hole.
Dalbey, 8-inch ... per doz. $ 5 75
Digwell, 8-inch ... " 14 50
Howe's, 6 and 8-inch .. " 12 50
Vaughan's, 4 to 9-inch " 7 00
Rafting.
Snell's ... 50&5%
Ship.
Snell's, with or without screw ... 40&5%

AWLS.

Brad, handled ... per doz. $0 26
shouldered, ass'd, 1 to 4 ... per gr. 1 10
patent, asst'd, 1 to 4 " 95
Harness, common ... " 1 20
patent ... " 95
Peg, shouldered ... " 1 10
patent ... " .40
Scratch, No. 2, handled ... " 4 50
No. 1, socket handled ... per doz. 1 15
Sewing, common ... per gr. 1 10
patent ... " 95

AXES.

Boys', Handled:
Camp Fire, 3-lb., per doz ... $5 75
" " 4-lb., freighters', per doz ... 6 75
Cast Steel, good grade, pr. dz., 5 50
Pioneer, per doz ... 6 75
Broad:
Peerless ... 50%
Plumb's Canada Pattern, ½50 10-5%
" Western " 40-10-5%
Red Warrior, per doz ... $18 50
Firemen's, per doz ... $15 50
Single Bitted (without handles)
Cuyahoga Chief, per doz ... $6 00
Gladstone, " " ... 7 75
Hubbard's " " ... 6 50
Hunt's " " ... 6 25
Lippincott's " " ... 6 25
Mann's " " ... 6 25
Pioneer " " ... 6 75
U. S. A. " " ... 7 75
Valley Forge " " ... 6 25
Second Quality " " ... 5 75
Double Bitted (without handles):
Lippincott's ... per doz $8 75
Mann's ... " " 8 75
Pioneer ... " " 9 25
U. S. A. ... " " 11 00
Valley Forge ... " " 8 75
Ship, Blood's ... " " 18 50

BALANCES, SPRING.

Frary's ... 50%
Pelouze ... 20%

BAGS, PAPER NAIL.

Pounds..	3	5	10	16	20	25
Per 1,000.	$1 60	1 85	2 60	3 40	3 90	4 75

BARS, CROW.

Pinch or Wedge Point ... cwt. $3 60

BEAMS—SCALE.

P. S. & W Co ... 40%

BEATERS.

Carpet, Rattan ... per doz $2 40
Raymond's Steel Wire, " " 80
Woven Wire, No. 4 .. " " 1 25
Egg.
Dover Pattern ... per doz. $0 70
Genuine Dover ... " 0 90
Mammoth Dover ... " 1 75
Lightning ... " 0 84
Lyon's (standard size) " 1 75
Whip, French ... " 1 35
Spiral ... " 0 40
Spoon ... " 0 40
Surprise ... per gro. 1 45

BELLOWS.

Blacksmiths' ... 70&5%
Hand, 8 in. ... per doz. $ 6 85
10 in. ... " 8 40
Molders', 12 in. ... per doz. 13 00

BELLS

Call.
2¾ in. nickeled bell . per doz. $ 1 40
2¾ in. " brass bell " 3 30
3 in. " " " " 7 25
3 in. " silver alloy bell, ... per doz. 16 50
4½ in. " brass bell and base ... per doz. 15 75
Cow.
Ordinary Goods ... 70&5%
High Grade ... 60&10%
Jersey ... 70&10%
Door.
Bigelow Automatic .. per doz. $9 50
Rotary.
3 in. bronzed iron bell " 5 25
3 in. nickeled " " " 7 50
3½ in. " " " " 9 00
Hand.
Hand Bells, Polished ... 60@60&10%
White Metal ... 50%
Nickel Plated ... 40%
Swiss ... 50&10%
Silver Chime ... 33⅓%
Miscellaneous.
Church and School, Steel Alloy, ... 50, 10 & 5%

Farm, lbs...	40	50	75	100
Each.	$0 85	$1 25	$1 75	$2 40

Miscellaneous Cont.
Strapped Sheep ... per doz. $1 75
House Gong ... 40&5%
Sleigh, Round, Loose ... 40&5%

BELTING

Leather—List dated Nov. 12, 1901.
Standard ... 75%
Eclipse ... 60&10%
Extra Grade ... 50&10%
Rubber—
Standard ... 75&5%
Amherst ... 65&10%
Extra ... 60&2½%

BEVELS—TEE.

Stanley's, rosewood handle, new list ... 40&5%
Stanley's, iron handle ... 40&5%

BINDING—OIL CLOTH.

Zinc ... 75, 10&5%
Brass ... 70, 10&2½%
Brass Plated ... 75, 10&5%

BITS.

Auger.
Extra Double Spur ... 70&5%
Ford Improved ... 40&10%
Irwin ... 40&10%
New Jenning's ... 50&10%
Russell Jenning's ... 25&7½%
Clark's Expansive ... 50, 10&5%
Steer's " Small ... new list ... $22.00
Irwin Car ... 40&10%
Snell's Car ... 60&5%
" Ship ... 40&5%
" " Auger Pattern Car .. 40&5%
Center ... 40&10%
Countersink—
Wheeler's ... per doz. $1 60
American Snail Head " 0 70
" Rose " " 0 80
" Flat ... " 0 70
Buck Bros'. Flat ... " 2 6
German ... " 0 70
Dowel, New Jennings ... 40&10%
Gimlet—
Standard Double Cut 50&5@50&10%
German Pattern ... per doz. $0 48
Gouge ... " 0 80
Spoon ... " 0 80
Countersink ... " 1 30
Reamer—
Buck Bros.' ½ Round. " 2 75
" " Square .. " 2 50
Standard ½ Round ... " 0 75
" Square ... " 0 75
German Octagon ... " 0 75
Screw Driver—
Round Shank ... " 0 48
" " extra quality " 1 40
Square Shank ... " 1 10

BLACKING—STOVE. (See Polish.)

BLADES—SAW.

Butchers'—
Standard ¾ & 1¼in ... 60&5%
Clock Spring ... 60&5%
Star ... 20%
Hack—
Disston's ... 25&5%
Griffin's ... 35&5%
Star ... 20%
Wood—
Jackson's ... per doz. $2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.
W. M. & Co.'s No. 20 .. per doz. $5 50

BLOCKS.

Snatch—
Wooden ... 50&10%
Steel ... 40&10%
Tackle—
Wooden ... 70&5%
Steel ... 50, 10&5%

BOARDS.

Stove ... 40&5%
Wash—
Anchor ... per doz. $1 60
Globe ... " 2 10
Banner ... " 2 60
Crystal ... " 3 15
Brass King ... " 3 15
Nickel Plate ... " 3 15
Enamel King ... " 3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron .. pr dz. $0 65
1¾ lb. " " " 1 60
2¾ lb. " " " 1 80
13 oz. lead ... " 3 00
6½ oz. brass. " 3 30
Mason's, 3 lb. lead ... " 4 00

BOILERS—FARM.

Profit ... 30&5%
Solon ... 35&5%

BOLTS.

Carriage, Machine, Etc.
Carriage, Common, new list ... 65%
Machine ... 65&5%
Elevator ... 50&10%
Plow ... 50&5%
Stove ... 75&10%
Tire ... 75%
Wagon Box Strap ... 70&10%
Mortise Door—
Gem ... 50-10&5%
Ives' ... 50&10%
Barrel—
Cast ... 50%
Wrought ... 75%
" Bronzed ... 40%
Flush, Wrought, B. K ... 40&5%
Spring—
Wrought ... 75&10%
" Brass ... 75&10%
Square—
Cast ... 40%
Wrought ... 60-10&10%

BORERS.

Angular, Miller's Falls, per doz $12 75
Bung, Common Ring with Handle—

Inches	1½	1¾	2
Per doz	$6 00	6 90	8 10

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each ... 25-10&5%

BOXES.

Mail, No..... 5 10 20
Per doz.....$3 65 10 50 13 00
Mitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's .....per doz $18 00
Twine, Nos... 20 30 25 35 121
Per doz $1 35 1 35 2 65 2 65 3 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....60&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146 .....50&10%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.50; No. 2, $13.00 per doz.
Shelf—
Cast Iron, Plain .....50&10%
Stanley's Wrought Steel.....
.....70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor..... " 9 50
Star..... " 5 00
IXL..... " 6 75
Well—
Galv'd Qts..... 8 10 12
Per doz $2 60 3 00 3 30
Wooden, top ear, plain, per doz 3 25
" " swivel " 4 65
" side-strap, plain " 3 35
" " swivel " 4 75

BUCKS, SAW.

Folding .....per doz $1 75

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 806, 810, 814 and 834
.....70-10&5%
Nos. 838, 840 and 842 .....75&5%
Nos. 822 and 823.....80-10&5%
Wrought Steel, Japanned—
Nos. 731 and 727.....70%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.....40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.)
.....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7½c
Swedes..... " 8¾c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$2 90 $3 15 $3 75 $4 75
Milk Cans—Gals.. 5 8 10
Elgin Pat., each, $ $1 75 $2 10
Iowa " 1 60 1 70 1 85
New Elgin" 1 65 1 85
New York " 2 10 2 35
Oil—
1 Gal. glass, Daisy....per doz. $2 35
1 " cushioned " 3 90
Star, gals 1 2 3
Per doz..... $1 85 $3 00 $3 90
Per doz.
Champion Faucet, 5 gallon...$ 5 65
Sterling Tilting....5 " ... 8 25
"High C" Pump...5 " ... 9 25
Eureka Pump....5 " ... 12 25
Wood Jacket .....50-10&5%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 40
" Clover Leaf..... " 3 40

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....70&5%
Common Plate—
Brass wheel.....65&10%
Iron and porcelain wheel....70&5%
Philadelphia Plate.....70&5%
Martin's.....40-10&5%
Payson's..... 75%
Tucker's—Wood and iron wheel..70%
" Rubber wheel.....65&10%

CATCHERS—GRASS

Ieder's No. 1.....per doz, $6 25
Eureka..... " 4 25
Ideal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 00
With Covert snaps " 4 75
" slide..... " 2 90
Without slide..... " 2 60
Bright Ox Chains—
5-16in. $6 75; ⅜in. $5 75 per 100 lbs.
Bright Coil Chain—
American, new list.....40%
German..... ...60-10&5
Triumph, new list.....30%
Cable Coil Chain—
Inch..... 3-16 ¼ 5-16 ⅜
Per 100 lbs...$9 75 $7 25 $5 90 $4 75
Inch ..... 7-16 ½ ⅝ ¾
Per 100 lbs....$4 60 $4 50 $4 25 $4 25
Cable Log Chain—Advance 25c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle.....40-10 & 5%
" toggle and snap, 40-10&5%
" open and closed ring.....40&5%
Halter Chains—
American, new list.....40%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " 30%
Jack Chain—
Brass.....50-10&5%
Iron.....50-10&5%
Picture Chains—
Light Brass, 3 ft.....per doz. 63c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs..... $4 45
Safety Chain—Brass.....60&10%
Stretcher Chains—
5-16 in., $7.75—⅜ in., $7.00 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6⅝—10-2..... " 39c
7 —10-2..... " 44c
Add 2c per pair for Hooks.
" 2c " for Twist Link.
Wagon Stay Chains—
Inch ¼ 5-16 ⅜
Per 100 lbs. $6.50 $6.00 $5.25
Well Chains—
With Swivel.....per doz. 95c
Without " ..... " 80c

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l
Crayon..... " 5½c

CHARCOAL.

In barrels .....per bu. 23c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHISELS.

Box—
Inches..... 10 12 14
Round....per doz. $2.10 $2.25 $2.75
Flat.....per doz. 2 85 3.60 4.20
Cold—
Good quality.....per lb. 12@ 20c
U.S.A., extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P S. & W. Co's.....35&5%
With Handles add... per doz. 60c

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.85 4.10 4.30
Belle, Barrel..... 70%
Common Dash, Gal.... 4 5 7
Per doz..... $6.50 7.25 7.75
Union, Gal..... 5 7 10
Each $3.40 3.65 4.65

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 50%
Carriage Makers'—P. S. & W. Co.'s.....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ...per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30 00 ..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle ..per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant.....per doz. .60

CLEANERS.

Pot—Wire.....per doz. $0.45
Side-Walk—Steel..... per doz. 3.15
Window—
Peerless.....50, 10&5%
XLCR.....65&10%

CLEAVERS.

Butchers'—F. R. Plumb's.....35&5%
Family—Ajax, In.... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 4¼c

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.55
Troy ..... " .38
Hame..... " .20

CLOTH.

Emery—
Ajax.....50&10%
B. & A..... 50%
Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire—
12 mesh, painted, per 100 sq.ft. $1.10
14 " " " " 1.85

COCKS—BRASS.

Compression Bibb.....60&5%
" Lock.....60%
Lever Bibb.....60%
Liquor 60%
Racking 60%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS—STOVE PIPE.

Inches 5 6 7
Plain Tin....per gr.$2.50 $2.80 $3 75
Japanned Tin, " 3.90 4.20 5.40
Lacquered Brass" 3.30 3.60 4.80

COMBS—CURRY.

Nos. 000 20 321 330 417 416
Per doz.$0.32 .80 1.00 .95 .80 1.00
Nos. 531 533 530 535 545 390
Per doz $0.96 1.20 1.10 1.65 1.40 1.30

COMPASSES.

Carpenter's.....65&10%
Pencil—Faber's.....per doz.$1.00

COOLERS—WATER.

Galvanized Lined—Lever Faucet.
Gal. 2 3 4 6 8
Each . $1.35 1.65 2.00 2.35 2.95
Galvanized Lined—Telegraph Faucet
Gal. 2 3 4 6 8 10 15
Ea$1.65 2.00 2.35 2.65 3.20 3.65 4.90
Porcelain Lined—
Gal. 3 4 5 6 7 8 10
Ea$4.50 5.75 7.00 7.75 8.60 10.40 12.25

COPPER—See Metals.

COPPERS.

Soldering—1 to 2 lb.....per lb. 25@29c
3 lb. and larger..... " 23c

CORD.

Picture—White Wire—List October 1900.....80&10%
Sash—
Baltic Braided Flax...per lb. 18½c
India Hemp, cable laid " 13 c
" " hawser " 12 c
" " plain " 13½c
Italian " cable " 21½c
Russian " " " 17 c
Samson, white " 31½c
" spot " 30½c
Silver Lake, white " 24½c
" " drab " 31½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS—SPRING.

Discount .....75&5%

COUPLINGS—HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES—GRAIN.

Morgan's Grapevine ..per doz. $22.00

CRAYONS—See Chalk.

CROOKS—SHEPHERDS'.

American Pattern .....per doz. $7 75
Montana " ..... " 8 00
Scotland " ..... " 7 00

CROW BARS.

Pinch or Wedge Point....per lb. 3½c

CUTTERS.

Meat—
Enterprise Nos. 5, 10, 12, 22, 32, and 42..... 25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4..... 35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout—
3-knife Crout.....per doz. $9.25
1 " Slaw..... " 1.35
2 " ..... " 2.00
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard..... 50&10%
American ..... 50&5%

DIES—STOCKS AND

Discount..... 40%

DIGGERS—POST HOLE.

Atlas.....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 7.00
Hercules..... " 10.75
Ryan's..... " 16.50
See also Augers—Post Hole.

DIVIDERS.

Wing .....70&5%
Extension Wing.....35&5%

DOORS—SCREEN.

⅞ in. 4 panel painted per doz. $ 6.75
1⅛ " " " " 7.25
1⅛ " " natural pine, fancy. per doz..... 11.25

DOOR HANGERS—BARN.

No. 3. Superb.....per doz. sets, $6 50
No. 4. Superb..... " 7 75
Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs, $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60%@65&5%
Blacksmith's Twist.....60%
Breast—
Common .....each, $2.25
Millers' Falls..... " 2.10
Hand—
Goodell's Automatic—per doz.
No. 01 No. 03 No. 2 No. 20
$7.75 $12.50 $14.25 $11.00
Goodell's Single Gear per doz. $16.00
Millers' Falls " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS—SCREW.

Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. ..... 33⅓%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.98 0.98 1.40
Plan'd..... " 2.35 2.35 3.15
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.98 .98 1.40
Pol'd..... " 1.75 1.75 2.70
Plan'd..... " 2 60 2.60 3.60
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.63 .63 1.00
Pol'd..... " 1.15 1.15 1.60
Plan'd..... " 1.80 1.80 2.60
"*O.H.*" *Corrugated*—In. 5 6 7
Common...per doz. 1.02 $1.20 $1.75
Smooth..... " 1.25 1.45 2.10
Polished.... " 2.10 2.50 3.15
Planished... " 2.90 3.50 4.35

EMERY—TURKISH.

Size .....5-lb. pkgs. ½ kegs, kegs.
No. 60 to 150, ⅌ lb. 6½c 4¾c 4½c
Flour.... " 5¼c 3¾c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
Q. V. B., " " ... " 1.25

EXTRACTORS—PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B.W.
Drifting Pick.....60&10%
Hooks and—
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FAUCETS.

Angle Plug.....per doz. $0 84
Brass—Andrew's 60%
Petroleum 60%
Wood—Cedar 60%
Cork Lined.....40&50%
Metal Key.....60%
Measuring—Enterprise.....35&5%
See also Cocks.

FILES AND RASPS

Arcade .....75&5%
Black Diamond.....70&10%
Disston's .....75&5%
Great Western.....75&5%
Keystone Mill.....75&5%
Kearney & Foote .....80&20%
New American .....75&5%
Nicholson's .....75&10&5%
Royal Mill .....70&10%
N. S. A.....80@20%
.....70&10&5%

FORCEPS—PIG

Barber's.....per doz., $7 25
Superior..... " 4 75
Whisson's Imp..... " 6 00

FORKS

Barley—
Steel.....60%, 10&5%
Wood, 4 tines, $5.25; 6 tines, $6.25 doz
Coal.....70, 10&2½%
Cotton.....70, 10&2½%
Hay—
Diamond, 2 tine.....65, 10&5%
" 3 " .....60, 7½, 10&5%
" 4 " .....66⅔, 10&5%
Golden Eagle, tine 60, 7½, 10, 10&5%
" " " ...66⅔, 10, 10&5%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5%
" 3 " .....60, 20, 10&5%
" 4 " .....66⅔&10&5%
Golden Eagle, 4 tine.....10&10&5%
Manure—
Diamond .....60, 20, 10&5%
Golden Eagle.....60, 20, 10, 10&5%
Ore.....70&10%
Potato—
Digging.....65&10&5%
Scoop .....70&10%
Spading—
Diamond .....70, 5, 10&5%
Golden Eagle.....70, 5, 10, 10&5%

FRAMES

Hack Saw—
Crown.....per doz., $ 8 75
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 75 2 20
Qts..... 8 10 12 15
Each.....$2 85 3 75 4 50 5 20
White Mountain, with Crank—
Qts..... 1 2 3 4 6
Each.....$1 20 1 65 1 90 2 10 2 70
Qts..... 8 10 12 15
Each $3 60 4 60 5 90 7 00

GATES.

Molasses and Oil.
Perfection.....40&10&5%
Stebbin's.....75&10&5%

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
....50&10%@50&10&5%
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.

Discount.....40@40&10%

GLASS—WINDOW.

All sizes, single strength.....80%
" double strength.....80%

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5%

GLUE

Bulk.
B Amber .....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle .....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.

Bright Wire.....85&5%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.40
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans.
1 lb. Frazer's carriage, pr. doz. $1.30
1½ lb. " wagon .. " 1.30
3 lb. " " " 2.40
5 lb. " " " 3.50

GRIDDLES

Soapstone .....40&5%

GRINDSTONES

Family—In..... 7 8 9
Per doz $7 75 8 75 10 00
Loose.
Per ton .....$20 00@$21 00
Mounted—
Ball Bearing..... 1 2 3
Each $3 10 2 90 2 75
Common Bearing.. 1 2 3
Each $2 85 2 65 2 50
Schofield's—
Auto.....each, $3 20
Bitreadle..... " 3 10

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 52

HALTERS

Jute Rope.....per doz., $0 80
Sisal Rope... ..... " 1 95
Web ..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's .....40&10%
Plumb's .....50&10&5%
Engineers'—
Maydole's .....40&10%
Plumb's Oil Finish.....60%
" Polished .....50&10&5%
Farriers'.
Maydole's .....35&5%
Plumb's.....40&5%
Machinists'.
Maydole's .....40&10%
Plumb's. .....50&10&5%

Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast..... per doz $1 10@$1 50
Maydole's .....30&7½%
Plumb's.....40&5%
Vulcan .....35&5%
Riveting.
Maydole's.....35&5%
Plumb's .....40&5%
Shoe. Plumb's.....30&5%
Tack.
All Iron .....per doz $0 32
Pol'd Iron, Hickory hdl " 0 48
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....70&10%
5 lbs. and over 75%
Masons'—Single & Double Face..75%

HANDLES.

Auger.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40&5@50%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 26c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 21c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted .....per doz 24c
Coal Pick .....40&10%
Drifting Pick.....40&10&5%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz 35c
Blacksmiths'.....per doz 36c@55c
Machinists'..... " 38c@60c
Hatchet.....per doz 36c
Hay and Manure Fork...50&5%@60%
Hoe and Rake .....50&5%
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade .....50&5%

HANGERS

Barn Door—
Rival.....per doz. prs., $3 90
Superb ..... " 6 25
Safety Flexible. " 7 50
Prouty ..... " 5 50
King ..... " 5 00
Eave Trough—
Baker's.....per gr., $2 35
Woodruff's ..... " 1 60
Imperial 15%
Wire 25%
Parlor Door—
Acme.....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 3 80
Prouty ..... " 3 00
Wilcox Trolley ..... " 3 75

HASPS.

Hinge, Wrought.....50, 25&10%
With Staples—See Staples.

HATCHETS.

Ajax .....40&10&5%
Blood's.....40&10%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown .....35&5%
Hammond's.....40%
Plumb's .....40&10&5%
Plumb's Warehouse.....40%
Roger's Ideal.....per doz $5 25
Underhill's Star Lath.....40%
U. S. A.....40%

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

HINGES.

Blind.
Clark's Gravity, 1 2 3
Per doz sets.....74c $1 80 $3 50
Parker's.....70%
Shepherd's Noiseless, for Wood casing.....doz 95c
Stanley's Wrought..per dz sets 84c
Gate.
Clark's. 1 2 3
Hgs & Lthe. dz.. $2 20 $2 35 $3 60
Hinges Only, " .. 1 60 1 70
Latchs Only, " .. 0 65 0 70
Knuckle.....per doz prs $6 25
Leed's..... " sets 6 50
Superior ..... " prs 9 25
Spring.
American.....25%
Bommer Bros. Ball B'rng Floor 40%
Bommer Bros. Spring Hinges .40%
Chicago.....25&5%
Clover Leaf.....per gro $8 75
Columbia Dbl. Acting....40&10&5%
Gem 25%
Ideal Detachable,....per gro $10 80
New Idea ..... " 8 75
Oxford.....20%
Wrought Iron.
Light Strap Hinges.....70&25&10%
Heavy Strap Hinges.75, 10, 25 & 10%
Light T Hinges..... 60⅔, 25 & 10%
Heavy T Hinges .....60, 5, 25 & 10%
Extra Heavy T Hinges 75, 25 & 10%
Cor. Heavy Strap.....75, 10, 25 & 10%
Cor. Ex. Heavy T.....75, 25 & 10%

Screw Hook and Strap.
6 to 12in.....per 100 lbs. $3.75
14 to 20in ..... " " 3.50
22 to 36in ..... " " 3.25
Screw Hook and Eye.
¾ to 1in .....per 100 lbs. $6.50
⅝in ..... " " 8.00
½in ..... " " 10.00

HOES.

Garden.....75&10&5%
Grub .....65&5%
Hazel.....per doz $6 25
Ladies' and Boys'.....70, 10, 5, 10&5%
Mortar.....75, 7½, 10&5%
Planter's Eye.....60&10&2½%
Weed .....70, 10, 10&5½%

HOOKS.

And Eyes.
Brass .....50&10&5%
Iron.....65&10%
Awning.....per gro $1 50
Belt.....75&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush.
Common Axe Handle ..... per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100.. $8 25 $9 75 $11 50 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....65%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought.....40&10%@50%
Corn.
Common, unpolished, per doz. $1 30
" polished... " 1 60
"Cut Easy," serrated, per doz. 2 90
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 4
Per doz..... $1 60 $1 65 $1 70
German .....per doz $1 85
Little Giant..... " 3 10
Wood's..... ... " 1 30
Hammock.
Common..... " 21c
With Plate..... " 36c
With Screw..... " 36c
Piggot's..... " $1 05
Lambrequin or Drapery...per gro 21c
Picture .....50%@50&10%
Potato and Manure.....70&10&7½%
Screw, Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb 5½c

HOOPS—TUB.

Ever Ready..... per case $1 65

HOSE—GARDEN.

Ply 3 4 5 6 8
Black, pr ft. 7¼c 8½c 9½c 10¾c 11¾c
Cotton, 3 ply.....per ft 6¾c
Red, 3 ply ..... " 7½c
Yucatan Endless...per ft 11¼c@12¼c

HUSKERS.

Boss.
Nos. E A B P PX
Dz.$1 75 $2 00 $1 95 Gr.$5 90 $5 40
Nos.2000 3000 4000 O OX
Gr.$3 10 $6 75 Dz.$1 15 $2 25 $1 75
Brinkerhoff's.....per gro 14 50
Common Sense.....per doz 1 60
Harrington..... ....per gro 4 50
Ideal—Nos. 102 101 100
Per doz..... $1 60 $3 00 $3 15
Johnson's ....per gro 7 75
Tyler's ..... " 8 40
Vaughan's..... " 2 20

IRON.

See Metals—First column.

IRONS.

Curling.
Common ....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby ..... " 1 50
Tourist, Folding ..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)25&5%
Sad.
Charcoal.....per doz $11 25
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 25
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 77c
No. 55 J, " ... " 74c
No. 50 T, " ... " 80c
No. 55 T, " ... " 77c
No. 50, Howells ..... " 77c
No. 55, " ..... " 74c
Tailors' Sad .....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 2 60

JACKS.

Locomotive .....75&5%
Wagon.
Meeker's .....per doz $11 25
Miller's No. 2 ..... " 7 75
T., M. & S..... " 9 00
Winner..... " 7 75

KETTLES.

Brass.....20%
Caldron.....35&5%
Copper.....per lb 26c
Maslin.....65&10%
Sugar .....50&10&5%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 2 50
Corn.
Acorn.....per doz $2 10
Ajax..... " 2 25
Clipper, Light, $1 60; Heavy, $1 75 per doz.
Disston's.....per doz $2 85
Easy (attached to foot) " 7 75
Greenleaf's..... " 3 60
Drawing.
Standard.....70%
Adjustable 20%
Barton's Carpenters'.....10&5%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Lightn'g, Holt's Genuine " 5 75
Lightning Pattern..... " 5 50
Wadsworth's Sp'r Point. " 8 25
Hedge.
Ajax, Heavy, $5 75; Ex. Heavy, $7 75 per doz.
Hoop.....20%
Mincing.
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Base, 2¼-in. Maple, Rubber Tip, ...per gro $1 60
Door, Mineral.....per doz 0 80
Porcelain ..... " 0 90
Jet..... " 0 88
Picture.....60&10&5%

LADDERS.

Common Long .....per ft 8½c@13c
Extension .....per ft 10¾c
Step.
Common..... " 6c
" With Shelf, add 10c.
I X L.....per ft 19c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Berger.....40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut .....50&5%
Sides, Ex. Quality.....per sq ft 21c

LEATHERS—PUMP.

Valve and Plunger.....50%

LIFTERS.

Stove Cover.
Japanned.....per gro $2 60
Coppered..... " 3 40
Alaska ..... " 7 50
Chilkoot..... " 4 75
Devore's..... " 5 50
Zero ..... " 3 50
Transom, Payson's.....70&10%

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute .....per doz $0 90
72-ft " ..... " 1 00
60-ft Sisal ..... " 1 50
72.ft " ..... " 2 00
60-ft Cotton..... " 1 25
50-ft Braided Cotton.. " 0 84

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax .....per doz	$5 25	$6 75
Angular... "	3 25	5 00
Boss ..... "	4 50	5
Upright... "	2 90	4

Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $54 00 $60 00 $66 00 $66 00
Globe, No. 1.....per doz $51 00
Horton Rotary..... " 54 00
O K Rotary ..... " 58 00
Round Wayne..... " 26 50
U. S. Steel..... " 60 00
Western Square, No. 2, $26 50; No 3, $28 50 per doz.

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ..... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ .. " 3 25
Tinners'.
Applewood ..... " 1 65
Hickory..... " 0 80
Hickory Sheet Iron.... " 0 95

MATS.

Door.
National Rigid .....60&5%
Queen Flexible 50%
Stove.
Augite Asbestos.....per doz $0 25
Crown " ..... " 0 30
Wire Covered Asbestos, Ex. Heavy .....per doz 1 00

MATTOCKS.

Extra.....65&5%
Hunt's..... 40&5%

MAULS.

Post.
Iron, lbs. 10 13 16 18 20
Per doz. $3 15 $3 85 $5 00 5 20 $5 80
Wood face, lbs. 10 11 12
Per doz..... $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat.70&10%

MEASURES.

	½ pk	1 pk	½ bu
Galvanized..per dz		$3 75	
Japanned.... "	$1 60	2 35	$3 10
Iron Bound. "	1 40	1 70	2 00

METAL.

Babbitt.
Alm .....per lb 8¾c
Best..... " 23c
Common, No. 4..... " 6½c
Copper Mixed..... " 18½c
Magnolia Metal..... " 19c
Tony..... " 10¼c
See Metals—In first column.

MICA.

First Quality.....40, 10&5%
Second Quality..... .....60%

MILLS—COFFEE.

Enterprise.....25&5%
National.....30%
Parker.....50&10%@60%

MOPS.

Erie .....per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz.. $1 65 $2 10 $2 25 $2 95

MOWERS—LAWN.

Ball-Bearing.
In. 15 17 19 21
Each..... $7 00 $7 60 $8 25 $8 90
Champion.
In. 12 14 16 18 20
Ea.. $2 10 $2 15 $2 15 $2 20 $2 35
Champion, High Chief.
In. 16 18 20
Each..... $3 40 $3 70 $4 00
Cheap Grades.
In. 12 14 16 18
Each..... $1 90 $1 95 $1 95 $2 10
Clipper .....50&10&10%
Girard, in. 14 16
Each $2 60 $2 80
Philadelphia.
All Styles Except A & E.....70&5%
Styles A & E.....60&5%

MUZZLES.

Horse.
Nos. 1 2 3 4 5
Doz.$0 30 $0 50 $0 55 $0 70 $1 00

NAILS.

Horse Shoe.
Ausable.....50%
Capewell 10%
Perfect.....40&5&
Putnam 33⅓%
Star 35%
Picture.
Brass Head.....40&10%
Judd's .....40&10%
Brads.....80&10&10%
Wire Nails—Small lots.....$2.10
Car load lots..... 1.95

NETTING—POULTRY.

Galvanized.....85%

NIPPERS.

End Cutting.
P. S. & W. Co.....40&5%
Stubb's Pattern .....40&10&5%
Hoof.
Heller's.....40&5%
P. S. & W. Co.....40&10%
V. & B 35%

NOZZLES.

Hose.
Genuine Boston.....per doz $3 40
Genuine Gem..... " 3 60
Magic ..... " 3 60

NUTS—HOT PRESSED.

Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 9¼c 6¼c 4¾c 4¼c 4¼c 4c 3⅝c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 12¼c 10¾c 6¼c 5½c 5¼c

OILS.

Linseed, Pure boiled .....per gal 44c
" " raw..... " 43c

OILERS.

Chase Pattern.
Brass and Copper .....35&5%
Zinc.....50&10&5%
Engineers'.
Cannon .....40&5%
Steel .....60&10&5%
Tin.....per doz $2 5 @$3 00
Machine.
Ajax.....per doz $0 80
Copper Plated Steel... " 1 50
Malleable Iron.....40&10&5%
Tin.....per doz 50c@65c

OPENERS.

Box, in.	10	12	14
Flat ...per doz	$2 85	$3 60	$4 15
Round.. "	2 10	2 25	2 70

Can.
American.....per doz $0 26
Delmonico..... " 1 50
Never Slip..... " 0 68
Perfect ..... " 1 35
Tip Top..... " 0 84
Crate, V. & B..... " 5 75

OUTFITS—COBBLING.

Combination ....per doz $11 50
Economical .... " 4 80
Family..... " 10 00

PADLOCKS.

Standard Wrought.....70&10&5%
Champion 50%
Eureka..... .....40&10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt., Without Ga....per doz $3 00
20-qt., " " .... " 3 50
20-qt., With Gauge.... " 5 00
Sap, 10-qt., Galvanized, $1 85; 12-qt., Galvanized, $2 20 per doz.
Stock, Galvanized.

Quarts.	14	16	18	20
Per doz...	$3 75	$4 00	$4 65	$5 25

Water, Galvd, qts. 10 12 14
Per doz..... $2 00 $2 30 $2 60
Wood.
Cable, 2-Hoop, $1 80; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $2 60 per doz.
Standard, 2-Hoop, $1 65: 3-Hoop, $1 85 per doz.

PANS.

Dripping .....50&10&5%
Fry, Common.....60&10&5%
Acme .....60&5%
Roasting.
Brownie.....Each 30c@37c
L. & H..... " 58c@80c

PAPER.

Building.
Plain.....per 100 lbs $1 10
Tarred..... " 1 25
Tarred Felt..... " 1 60
Diamond A, Red Rosin.pr roll 0 63
Leader, Red Rosin..... " 0 48
Sand and Emery.
Ajax.....50&10%
B. & A.....50%
Wrapping.
Grecian Express .....per lb 3½c
Rag ..... " 1½c

PARERS.

Apple.
Bay State .....per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain..... " 5 25
Potato.
Goodsell's Saratoga..per doz. $6 50
White Mountain..... " 6 00

PICKS

Drifting and Poll Picks.....60&10%
Extra Railroad.....65&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws.....30%
Blacksmiths'.....50%
P. S. & W.....40&10&5%

PINS.

Clothes.
Common.....per gr..$0 12
Hoyt's..... " .. 30
U. S..... " .. 70
Picket.
Fluted.....per doz..$0 72
Round..... " .. 1 55
Spiral ..... " .. 1 90

PIPE.

Conductor.	Nested	Not nested
Eastern	75&7½%	75&2½%
Central	75&2½%	70&12½%
Southwst'n ..	65-10&10%	65-10&5%
Mo. River	75&2½%	80&2½%
Southern	70&7½%	75-10&5%

Lead.
Full coils.....per lb..$0 5¾
Cut " ..... " .. 06
Stove.

Acme—In.	5	6	7
Smooth, per jt.	11½c	11½c	13¾c
Planished, "	22c	33c	43c
Peerless—Smooth	9½c	9½c	12c
Polished.	16c	18¼c	23c
Planished.	29c	31c	40c
Made-up—In.	5	6	7
Smooth.....	11¼c	11¼c	14¼c

7 to 6 in. Smooth Tapers, pr jt..15c
6 in, Smooth T's..... " ..50c
7 to 6 in. Planished Tapers.....45c
Wrought Iron.
List March, 1900.
⅛ to ½ in., black.....discount, 56%
⅝ to 12 " " ..... " 63%
⅛ to ½ " galvanized.. " 43%
⅝ to 12 " " .. " 54%

PLANES.

Ohio.....60&5%
Stanley Planes, new list..30%@30&5%
Bailey Planes 35%
Sandusky.....25%

PLANTERS.

Corn,
Improved Eclipse....per doz..$7 75
Monitor..... " .. 7 25
Triumph..... " .. 5 75
Potato
Acme.....per doz.. $5 75
Challenge ..... " . 10 75

PLATES—TIN.

See Metals in Column 1.

PLIERS.

Button's—In.	4½	6	8	10
Per doz.....	$2.60	$3.10	$3.90	$5.20
Button's Pattern.				
In.	4½	6	8	10
Per doz.....	$2.35	$2.50	$3.45	$4.40

Cutting.
Cronk's Comb.....per doz..$6 25
Bernard's.....30%
Lodi.....40&10&5%
Stubb's.....50%
Fencing.
Cronk's.....per doz..$9 25
Farmers' Choice..... " .. 8 75
Russell's..... " .. 8 65
Flat and Round Nose.
Bernard's.....30%
German.....50%
Lodi 40%
Paragon.....40&10%
P. S. & W. Co. 60%
Gas—In. 8 10 12
Per doz.....$3.10 $4.00 $4.90

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron 30%
Davis' Inclinometer.....20%
Stanley's

Nos.	00S	0S	2S	3S
Per doz..	$4.15	$4.60	$7.20	$7.90
Nos.	30	25	50	35
Per doz.	$12.90	$17.20	$17.20	$11.75

POINTS. Discount

Drive Well Points..... ...80&5%

POKERS—STOVE.

Wr't Iron, str't or bent, per doz.$0 50
Wr't Iron, wood hand'ls " 75
Nickel pl'td. coil hdl's.. " 70

POKES—ANIMAL.

American ....per doz.....$2 60
Brown's wr't steel " ..$5 25@6 25
Eagle... ..... " $4 25
Success..... " 2 60

POLES—FISHING.

Bamboo.
Ft. 12 14 16 18 20
Pr 100..$2.75 $3.40 $4.75 $6.00 $7.75

POLISH.

Metal.
Burnishine, ½ pt....per doz..$1 60
1 pt.... " .. 2 60
Pride of the Bar..... " .. 1 60
Putz Cream.

Pts.	1-6	¼	½
Per doz.....	$0.84	$1.25	$1.80
Pts.	1	2	4
Per doz.	$3.60	$6.00	$9.00

Wondershine

Pts.	1-6	½	1	2
Per doz...	$0.65	$1.30	$2.15	$3.00

Shoe.
M. D. C.....per doz..36c@50c
F. C. O..... " 40c
T. M ..... " 50c@$1 25
Imperial.....per gr.....$5 00
Stove.
Black Eagle, 1 lb cans, pr gr..$13 00
Blackene, 1 lb cans.... " .. 13 00
Black Jack, 1 lb cans.. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Enameline..... " .. 4 75
Nickel Plate..... " .. 4 50
Rising Sun ..... " .. 6 00

POPPERS, CORN.

Round or Square, 1 qt. per doz., $5@95c
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 30
1 qt. reversible .....per doz., 1 60

POTS—FIRE.

Bernz.....each..$3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City.....each.. 6 25
Gem ..... " .. 6 75

POWDER.

See Ammunition.

PRESSES—FRUIT AND JELLY.

Enterprise Manufacturing Co... 25%
Henis .....per doz. $9 10

PRUNERS.

Disston's Pole.....per doz..$7 50
Henry's Improved..per doz..65&10%
Water's Improved. " 75%

PULLERS.

Cork.
Modern.....each..$2 60
Quick and Easy..... " .. 2 90
Nail.
Giant.....per doz..$9 00@10 50
Giant Pattern. " .. 6 00
Tack—Giant .... " .. 60

PULLEYS.

Awning—Jap'd.....35&5%
Clothes Line..... .....30%
Hay Fork.
Iron Wheel, 5 in .....per doz..$1 70
Wood Wheel, 6 in ... " .. 1 60
Wood Wheel, 6 in... pass knot..... " .. 1 75
Hot House—Jap'd 33⅓%
Screw..... " 25%
Side..... " 35%
Sash.
Chicago .....per doz..$0 29
Clark's..... " .. 42
Common Sense, 2 in.. " .. 26
" Pattern, 2 in.. " .. 21
Empire..... " .. 23
Ideal..... " .. 21
Ottumwa. ball b'ring " .. 38
Grand Rapids, No. 17 " .. 28
" " No 11 " .. 24

PUMPS

Pitcher Spout.

Nos.	1	2	3	4
Each.....	$0.98	$1.10	$1.20	$1.45

Spray.
Blizzard.....per doz..$14 25
Cyclone, tin..... " .. 3 90
" copper..... " .. 6 75
Daisy..... ..... " .. 2 75
Little Giant.....each.. 2 40

PUNCHES.

Conductors', No. 22....per doz..$2 50
Machine.....per lb . 19
Saddlers'.
Common.....per doz..60c@70c
Good..... " ..72c@84c
Spring.
1 Tube .....per doz..$2 25
4 Tube, revolving.... " .. 5 25
Tinners'.
Hollow.....40%
Solid.....each..5½c

PUTTY.

In Bladders.
Strictly pure .....per 100 lbs. $2 25
Commercial ..... " " 2 10

RAIL.

Barn Door.
Light Wrought.. .....per ft. 3c
Safety .... " 5½c
Single Flange ..... " 1⅝c
Sliding Door.
Painted iron .....per ft. 4½c
Bronzed wr't iron..... " 8½c

RAKES.

Coal or Road.....per doz. $5.25
Garden.
Steel, braced .....70&10&5%
Steel, bow.....70,5,10&5%
Malleable iron, heavy.....70@10%
Hay—Wood.....per doz. $1 05@1 70
Lawn—Wood.
Common .....per doz. $2
Automatic..... " 6 00
New Lawn Queen .... " 3 60
Jumbo, 36 teeth ..... " 5 75

RASPS—See Files.

REGISTERS.

List Sept. 1, 1901.

Black Japanned, White Japanned, Bronzed Finishes, Nickel Plated, Electro Plated Brass, Bronze or Copper.....70&10%

RINGS

and Ringers—Hog.
Blair's Rings .....per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings..... " 65c
Brown's Ringers..... " 90c
Champion Rings..... " $2 35
Champion Ringers..... " 1 70
Hill's Rings..... " 42c
Hill's Ringers..... " 70c@95c
Mazor Rings ..... " 80c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers..... " $1 05
Wolverine Rings..... " 1 50
Wolverine Ringers.... " 70c
Bull.

Copper,	2½-in.	3-in.
per doz.....	$1 25	$1 70
Steel.....per doz.	95	1 05

Steel, Nickel Pl't'd, 2½-in., doz. 1 35
Rea's Self Piercing.. .....$1.95
Fruit Jar—White .....per lb. 30c
Key.
Split, round.....per doz. 16c
Split, square ..... " 33c
Ball, round..... " 22c

RIVETS.

and Burrs.
Copper Belt .....50&10&5%
Coppered Iron 75%
Tinners'.....75%
Hame.....per lb. 8c
Slotted Clinch .....per doz. 70c@75c
Tubular—Nos. 1 and 2, assorted sizes.....per doz. 60c

ROPE.

Per lb.

Manila, 7-16 inch diameter and larger.....13½c "
Sisal, 7-16 in. and larger.. 9¾c "
Cotton.
¼ and 5-16-in. on reels...per lb. 12c
¼ and 5-16-in. in coils... " 12½c

RULES.

Boxwood .....40%@40&10%
There is no regular discount on Boxwood Rules. They are now sold net.
Ivory .....35&5%

SASH WRIGHTS.

Per ton.....$23.50

SAWS.

Back.
Disston's.....25&5%
Jackson's .....25&5%
Butchers'—Disston's.....40%
Circular.
Disston's.....50%
Hiles' 50%
Compass.
Common .....per doz. $1 35@1 60
Disston's .....25&5%
Cross-Cut.
Atkin's.....40%
Disston's.....40&10% &50%
Pocahontas Bit.....per ft. 20c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins' .....per doz. $5 50
Disston's ..... " 5 75
Hack.
Disston's.....30%
Keystone.....30%

SAWS—CONTINUED.

Hand and Rip.
Brown's ..... 30&5%
Disston's No. 7 ..... 30&5%
Disston's Nos. 8, D8, 12, 76, D100, and 120 ..... 25&5%
Gorham's Comb ..... 30&5%
Keystone ..... 30&5%
Sam Sickles', hand...per doz. $4 25
"I Will," hand ..... " 5 75
"I Will," rip ..... " 6 75
"U. S. A." hand ..... " 12 25
"U. S. A." rip ..... " 14 25
Keyhole—Disston's ..... 25&5%
One Man 50%
Panel.
Brown's ..... 30&5%
Disston's No. 7 ..... 30&5%
Disston's Nos. D8 and 12 ..... 25&5%
"I Will" 40%
"U. S. A." ..... 40&10&5%
Pruning.
Avery's Duplex ..... 25&5%
Brown's ..... 25&5%
Disston's ..... 25&5%
Wood.
Common ..... per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever ..... per doz. $ 1.20
Stillman's Lever ..... per doz. 1.30
Leach's ..... per doz. 5.00
Nash's ..... per doz. 4.20
Monarch ..... per doz. 6.50
Morrill's, Old Style ..... per doz. 5.00
" No. 1 ..... per doz. 7.25
" No. 3 & 4 X Cut. per doz. 11.50
" No. 11 ..... per doz. 8.40
Aiken's Pattern ..... per doz. 3.50

FRAMES—SAW.

Common, plain ..... per doz. $1 20
" painted ..... " 1 60

SCALES.

Counter.
Fairbank's Standard 40%
Hatch's ..... per doz. $21 50
Little Detective, 1 2 6
Each $1 65 1 85 1 80
No. 1 Tea ..... per doz. 7 75
Union Platform ..... each 2 35
Pelouze 25%
Turnbull's Market 50%
Platform.
Common, 600 800 1000
Each $8 75 9 75 10 75
Chicago Standard ..... 33⅓%&40%
Fairbank's Standard 40%

SCOOPS.

Ames ..... 10&10%
Eastern Pattern. Socket Strap.
Nos. 2 3 4 5 6
Per doz. $9.00 9.25 9.50 9.75 10.00
Nos. 7 8 9 10 12
Per doz. $10.25 10.50 10.75 11.00 11.50
Western Pattern. Socket Strap.
Nos. 1 2 3 4 5
Per doz. $8.50 8.75 9.00 9.25 9.50

SCRAPERS.

Box.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 10
Cabinet.
Ajax ..... per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80 ..... " $7 75
Road.
Cubic ft. 7 5 3
Without runners, ea. $4.50 4.20 4.00
With runners ..... " 4.75 4.50 4.25

SCREWS.

Bench.
Iron 40%
Wood, white maple..per doz. $3 60
Hand--Wood 20%
Hand Rail ..... 70&10%
Jack ..... 75&5%
Lag or Coach. Gimlet Point..70&10%
Saw—Centennial.
Nos. 1 2 3 4
Per doz. 22c 25c 32c 35c
Wood.
F. H. Bright Steel ..... 90&10%
R. H. Blued Steel ..... 85&10%
F. H. Jap'd Steel ..... 80&15%
F. H. Brass ..... 85&10%
R. H. Brass ..... 80&15%
R. H. Nickel Plated ..... 75&10%

SCYTHES.

Clipper, grain ..... per doz. $8 75
Dutchman, grass ..... " 5 50
Golden Clipper, grass ..... " 5 25
U. S. A., grass ..... " 6 50

SETS.

Nail.
Round, common ..... per doz. $0 33
Square " ..... " 42
Octagon " ..... " 33
Square, Buck Bros. ..... " 1 25
Cup Point, knurled, pr doz. 70c@90c
Rivet.
Farmers' ..... per doz. $1 45
Tinners' ..... 50&10%
Saw.
Aiken's Pattern ..... per doz. $3 50
Common Lever ..... " 1 20
Disston's Monarch ..... " 6 50
" X Cut ..... " 11 75
German ..... " 1 35
Morrill's Old Style ..... " 5 00
" Pattern ..... " 4 50
Leach's ..... " 4 80
Nash's Hand ..... " 4 00
" X Cut ..... " 5 50
Stillman's Lever ..... " 1 30
" X Cut ..... " 2 50

SHARPENERS—SKATE.

Diamond ..... per doz. $1 60

SHAVES--SPOKE.

Iron ..... per doz. $1 15@$2 25
Wood ..... " 2 75@ 4 75
Bailey's ..... 50&5%
Goodell's 15%
Stanley's Universal ..... 30&5%

SHEARS.

Pruning.
Buckeye, No. 1 ..... per doz. $6 50
" No. 2 ..... " 8 50
California Pat., 9 in. ..... " 4 25
" 10 in. ..... " 5 00
Draw Cut, No. 3 ..... " 15 50
" No. 4 ..... " 18 50
Henry's Pat. 0 01 14 012
Per doz. $1.90 $2.50 $3.15 $3.50
Star ..... per doz. $4 75
Sheep--No. BBA.
6 in. 6½ in. 7 in.
Reg. Grip. $11.00 $11.35 $12.00 doz.
Nar. Grip. 11.20 11.00 12.15
Tinners'--See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common..Per set. $0.34 $0.42 $0.68
Hatfield's. " .. .75 1.00 1.60

SHELLERS--CORN.

Union ..... per doz. $8 00

SHOT--See Ammunition.

SHOVELS AND SPADES.

Railroad, Etc.
Gold Hibbard's ..... per doz. $10 00
C. H. Conovers's ..... " 9 25
Beckwith's ..... " 9 25
Hickory ..... " 8 50
Greenleaf's ..... " 7 25
Columbus ..... " 7 00
Ames' new list ... Discount 10&10%
Coal.
No. 2 Ajax ..... per doz. $8 00
No. 2 Bear ..... " 5 25
Ames' new list ... Discount 10&10%

SIEVES.

Champion ..... per doz. $1.00
Hunter's Genuine ..... " 1.20
" Imitation ..... " 1.00
Tin Rim, 16 mesh plain wire" 1.35
Wood " 16 mesh plain wire" .85

SINKS.

Cast Iron.
Painted ..... 50&10&5%
Enameled, White ..... 60&10&5%
Wrought Steel.
New Era 50%

SLEDGES--See Hammers.

SNAPS—HARNESS.

Champion 65%
German Pattern ..... 30&5%
Judd's Pattern ..... 60&10%@70%

SNATHS.

Double Ring, Bush ..... per doz. $6 50
Patent Loop " ..... " 7 00
" " Brass ..... " 6 25

SNIPS--TINNERS'.

Hernisch's ..... 40&5%
National ..... 40&5%
P. S. & W. Co.'s ..... 25&5%

SOLDER.

See Metals, Column 1

SPRINGS--DOOR.

Perfect. Nos. 1 2 3 4
Per doz. 35c 40c 45c 50c
Reliance, Light $1.40. Heavy $2.20 doz.
Star ..... " .90, " 1.20 "
Torrey's ..... per doz. $1 35
Warner's ..... per doz. 68c@$1 35

SQUARES

Steel and Iron ..... 70&5%
(Add for Bluing, $2.50 per doz., net.)
Mitre--Stanley's No. 12 ..... 40%
Try.
Stanley's No. 20, new list ..... 40&5%
" Nos. 12 and 14 ..... 40%
Try and Bevel--Stanley's ..... 40&5%
Try and Miter.
Fox's ..... per doz. $7 25
Winterbottom's 50%

SQUEEZERS--LEMON.

Common Wood ..... per doz. $0 72
Porcelain Lined, wood ..... " 1 30
Boss, tinned iron ..... " 80
Pearl, nickel plated ..... " 1 30
Star " " ..... " 1 60
Little Giant, tin'd iron ..... " 4 25
King ..... " 2 40
Drum ..... " 4 25

STAPLES.

Blind—Barbed ..... per lb. 9½@10c
Butter Tub ..... " 8@8½c
Fence, less than carload.
Polished ..... per 100 lb. $2 40
Galvanized ..... " 2 80
Netting—Galvanized ..... per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples ..... 85&10%
Extra heavy 80%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan ..... per lb. 5½@7c
More Grit ..... " 9½c
Washita ..... " 16½c
Emery ..... 60%@66⅔&5%
Oil—Unmounted.
Arkansas Hard ..... per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6¼@6¾
Lily White ..... " 42c
Queer Creek ..... " 14½c
Ouachita ..... " 36c
Washita ..... " 25c
Sythe.
BlackDiamond ..... per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum ..... " 7 50
Green Mountain ..... " 4 20
La Moille ..... " 7 00
Pikes Gen. No. 1, Ind. Pond., per gro 4 75
White Mountain ..... per gro. 6 50
Willoughby Lake ..... " 6 25
Red End ..... " 3 15

STOPS—BENCH.

Hotchkiss' ..... per doz. $3 60
Morrill's No. 1 ..... " 5 75

STOPPERS—FLUE.

Common ..... per doz. 42c
Crown ..... " 48c
Gem, flat, painted ..... " 73c
Gem, cor'd, decorated ..... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense ..... " 95c

STRAPS.

Scoop ..... per doz. prs. $1 80
Skate ..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's ..... per doz. $3 90
Excelsior ..... " 5 50
Malleable Iron ..... " 65
Perfection ..... " 6 00
Wire.
N. S. Elwood's ..... per doz. $5 00
O. S. Elwood's ..... " 5 25
Little Giant ..... " 4 75
Star Lever ..... " 6 25
Star Tackle Block ..... " 9 25
Warner's ..... " 6 25

SWEEPERS.

Carpet—Bissel's.
Standard ..... per doz. $21 00
Grand Rapids Jap'd. ..... " 23 00
Grand Rapids Plated ..... " 25 00
Baby ..... " 2 10
Little Jewel ..... " 6 25
Misses' ..... " 9 75
Lawn--Finley 10%

SWIVELS.

Melleable Iron ..... per lb. 6½c
Wrought Steel ..... per gro. $4 50

TACKS.

American Cut ..... 60&5%
American Wire ..... 85&25&10%
Bill Posters Cut ..... 90&40%
Blued Carpet ..... 90&15%
Tinned Carpet ..... 90&15%
Gimp ..... 90&30&10%
Upholsters' Cut ..... 90&40&5%
Upholsters' Wire ..... 90&25%
Double Pointed ..... 90&20%
Copper ..... per lb. 26c
Canvas Nails ..... 75&5%
Clout Nails ..... 75&10&5%
Hungarian Nails ..... 80&5%

TAPES--MEASURING.

Asses' Skin ..... 40&5%
Bend Leather 20%
Chesterman's 25%
Patent Leather 20%
Lufkin's 30%
Rival Steel ..... 40&10%
Pocket ..... per doz. $2 00@$3 50

TENTS AND PAULINS.

Wall Tents ..... 50&20&10%
Wedge Tents ..... 50&10&5
Paulins ..... 50&10&5%
Wagon Covers ..... 50&10&5%

THERMOMETERS.

Tin Case ..... per doz., 95c@$1 25
Wood Back ..... " $1 75@ 9 00
Glass ..... " 15 50

TIES.

Bale.
Single Loop ..... 80&10&5%
All other kinds ..... 65&10%
Cow--See "Chains."

TONGS.

Crimping—Packham's ... per pair 50c
Gutter—P. S. & W. Co.'s ..... 15&10%
Pipe—Brown's 50%
Roofing—P. S. & W. Co.'s ..... 15&10%

TOOLS—SAW.

Atkin's Dexter ..... per doz. $4 25
Atkin's Excelsior ..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%
Simond's Crescent ..... per doz. $10.00

TRAPS.

Game.
Hawley & Norton 70%
Newhouse 50%
New Victor 80%
Mole—Reddicks ..... per doz. $5 75
Mouse and Rat.
Wood Choker ..... per hole 10c
Tin Choker ..... " 11c
Delusion ..... per doz. 85c
Out-o'-Sight, Mouse ..... " 65c
Out-o' Sight, Rat ..... " $1 35
Imitation Sight, Rat ..... " 80c
Marty Rat ..... " $6 75
Marty Rat, Imitation ..... " 3 75
Marty Mouse ..... " 3 15
Marty Mouse, Imitation ..... " 2 10
E-Z-Ketch, Mouse ..... " 42c
E-Z-Ketch, Rat ..... " 90c
French Automatic ..... each $3 60
Fly.
Balloon ..... per doz. $1 25
Harper's ..... " 1 35

TROUGH--EAVE.

Eastern ..... Discount 80&7½%
Central ..... " 80&2½%
South Western ..... " 75-10&2½%
Missouri River ..... " 80&2½%
Southern ..... " 75-10&5%

TROWELS.

Brick.
Standard 30%
Brade's ..... 10&7½%
Disston's 30%
Rose's 25%
Plasterers'.
Standard 33⅓%
Disston's 30%
W. & McP 25%

TRUCKS.

Bags ..... each $1 60
Handy ..... " 1 35
Warehouse ..... 60&5%

TUBS-WASH.

	No. 3	Ex. 2	1	large
Standard, per doz.	$5.25	6.25	7.25	9.75
Dowel ..... "	5.60	6.60	7.50	10.00
Cedar ..... "	6.50	7.50	8.25	
Indurated. "	7.20	7.95	9.45	11.70

Galvanized.

	No. 1	2	3
Per doz	$6.00	6.50	7.25

VISES.

Bonney's 30%
Cheney's 20%
Parker's Oval Slide ..... 50@50&10%
Parker's Parallel ..... 15@20%
Parker's Victor 10%
Parker's Combination ..... 5 &10%
Solid Box 50%
Adam's Mechanics' ..... each $2 50

WARE,

Cast-Iron Hollow.
Ground ..... 50&10&5%
Unground ..... 60&5%
Extra Finished ..... 40&10&5%
White Enameled ..... 40&10&5%
Muslin Kettles ..... 65&10%
Enameled.
Adamant, one coat, 70&10%@75&10%
The manufacturers divide this ware into two classes, which take different discounts, noted above.
Crysolite, three coat ..... 40&5%

WASHERS.

Leather. In.	⅜	1	1⅛	1¼	1⅜
Nut, per C	16c	17c	19c	25c	32c
Collar, per C	35c	40c	40c	43c	

Wrought Iron.

In.	¼	5-16	⅜	½	⅝	¾ to 1
Per lb.	8⅛c	7½c	6½c	5c	4½c	4¼c

Wrought Steel.

In.	¼	5-16	⅜	½	⅝	¾ to 1
Per lb.	9½c	8½c	7½c	6c	5½c	5¼c

WEDGES.

Ax ..... per doz. ... 30c
Galling ..... per lb.. 10¾c
Saw ..... " .. 8¾c
Wood Choppers.
Lake Superior and Oregon, Pat ..... per lb.. 9¾c
Reg. Pattern, Steel ..... " .. 4 c
Truckee " " ..... " .. 4¼c

WEIGHTS.

Hitching ..... per lb.. 2½c
Sash--F.O.B. Chicago..pr ton..$28.00

WHEEL BARROWS.

Common Railroad ..... per doz. $12 75
Heavy " ..... " .. 19 50
Railroad, ball bearing ..... " .. 19 00
Santiago Steel Tray ..... " .. 26 50
No. 04 Steel Dirt ..... " .. 51 00
No. 04½ " " ..... " .. 55 00

WHEELS.

Emery and Corundum ..... 75&5%
Well. In. 8 10 12 14
Per doz. $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads ... pr 100 lbs.. $2.35 $2.65
Less than car " .. 2.40 2.70
Brass.
In coils 20%
In 1 lb. spools, new list ..... 50&10%
Broom--Tinned ..... 60&10&10&10%
Cable--Same price as Barbed Wire.
Copper.
In coils ..... 20&10%@33⅓%
In 1 lb. spools, new list ..... 50&10%
Fence--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.20
Nos. 6 to 9, Galv'd ..... " 2.60
Hair--New list ..... 50&10%
Market.
Bright, full bdles ..... 75&2½%
Bright, broken bdles ..... 70&10&5%
Coppered, full bdles ..... 70&7½%
Coppered, broken bdles .. 70&2½%
Tinned, full bdles ..... 70, 10&5%
Tinned, broken bdles ..... 70&5%
Picture.
In coils ..... 80%@80&10%
In 5 lb. spools ..... per lb.. 26c
Plain—Small lots $2.00
Car lots 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard 60%
Alligator ..... 65&5%
Always Ready ..... 40&10&5%
Bemis & Call 40%
Coe's Standard ..... 40&10%
Girard's Agricultural 75%
P. S. & W. Co.'s Agricultural 75%
" " Knife H'dle.. 50&5%
Wescott's "S" 33⅓%
Malleable ..... per lb.. 6c
Stillson Pipe ..... 60&5%
Trimo " 60%

WRINGERS.

Clothes.
Nos. 22&110, Guarantee, pr doz. $28 00
No. C 350, Novelty ..... " 22 50
No. 3, Empress ..... " 25 50
No. 150, Sunshine ..... " 18 00
No. 130, Mendota ..... " 18 00
No. 12, Success ..... " 16 00
No. C 500, Royal ..... " 28 00
Blue Bell Ball Bear'g. " 25 00

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

Wanted—Stock of general hardware in exchange for farm in northwestern Iowa. A fine piece of property well improved. Stock to be removed. Address, Lock Box 433, Leland, Ill. 17

Steel Range Business.—An experienced and up-to-date man would like to communicate with some company about to start manufacturing. Address Antietam Paper Co., Hagerstown, Md. 17

For Sale—Well established hardware, tin and stove business, together with a well-paying tinshop, in good location for selling farming implements, with property; good reason for selling. Address, Chas. Cammerer, 38 Valley St., Dayton, Ohio. 17

For Sale—A good up-to-date hardware and plumbing business; invoice about $7,000 or $8,500; can be reduced if necessary; good reason for selling; best business town in Union. Address "No. 1," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

For Sale—Hardware and furniture business in the best town in South Dakota; county seat, 2,000 population; large territory to draw from; new store, reasonable rent; new stock; best of reasons for selling; established, growing business, invoice from $5,000 to $6,000; cash only. Address "South Dakota," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

For Sale—A stock of hardware in one of the best towns in northeastern Iowa. Stock is clean and will invoice about $5,000; good reasons for selling. Address A. E. Flick, Dubuque, Ia. 16

For Sale—A nice, clean stock of hardware and farm implements, tinner's and pump tools, good location, good business, good reasons for selling. Address Lock Box 107, Holland, Minn. 16

For Sale—One P. S. W., 30 in. formers and one 30 in. Wright's folder, both are in good shape and will sell them cheap, or will trade them for a second-hand P. S. W. groover, 30 in. M. V. Secor, Winnebago City, Minn. 16

For Sale—Hardware business located in prosperous farming and manufacturing center; tin shop in connection; stock clean and well assorted; will inventory $3,000; must sell on account of sickness; a rare opportunity. Address Hardware, 55 Stephenson St., Freeport, Ill. 16

For Sale—Hardware, tin shop, paints, oils, in fine country town of 1,000. Stock invoice $2,100; have electric light, water works; also have in store; 60 miles northwest Chicago; never known to have failure in crop; sales $7,500 a year. Reason for selling sickness. Sell reasonable if taken at once. Address, "Reasonable," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 16

For Sale—Stock of hardware, stoves, ranges and furnaces; tin and cornice shop in connection. Centrally located in Denver, Colo. Stock is clean and up to date; the location is well established, having done business at this stand for twelve years. Must sell on account of sickness. Now is the time to buy, as the fall trade is just starting. Address "Fall Trade," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 16

Wanted to Buy—A hardware stock from $3,000 to $4,000. Address A. E. Glines, Rockwell, Iowa. 16

I have 1,040 acres of choice farming land in the famous Red River Valley, Minnesota, rich black soil, where crops are always a certainty and values fast advancing. Will exchange all or part of this land on equitable basis for good stock hardware. Address "Farm Exchange," Breckenridge, Minn. 15

Clean hardware stock, invoicing $5,000; selling $15,000 and clearing $6,000 annually; reason for selling owner does not want the responsibility of business longer; correspondence solicited from those meaning business; stock located in heart of a properous city of one hundred and fifty thousand people and splendid climate. Address "Eureka," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 15

For Sale—For cash only, exceptional opportunity offered, my stock of about $3,000 of hardware, stoves, tinner's tools and tin shop stock in a small town; established 27 years; northern Illinois; trade mostly cash, where crop failures are never known and land selling at $100 an acre. Furniture may be added as there is no furniture sold in town. I will rent two-story brick store or sell it. Address "Furniture," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 14

For Sale—Good clean stock of hardware with tin shop in connection; also a line of the best paints and oils; will invoice about $3,500; no opposition; a live town in southern Wisconsin; best of farming land; new chair factory will start Nov. 1. Address Lock Box 31, Brooklyn, Wis. 14

TINNERS' TOOLS.

Wanted—1½, 2 or 2½ horse power gasoline engine; must be in good order; quote lowest cash prices. Stier Hdw. Co., Tigerton, Wis. 17

For Sale—A back geared screw cutting Sebastian lathe, foot power, 9 in. swing, 25 in. between centers, in A1 condition; also all tools for same, including 2 chucks, $45. Address "1182," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

For Sale—One Auld & Conzer plate punch and press; cheap. Guaranteed good as new. Used only a short time. J. H. Allion, Fayette, O. 16

Wanted—30 in. P. S. & W. adj. bar folder; also No. 1 or 2 Breakhorn stake. These tools must be in first-class condition. Address John H. Roberts, 241 Eighth Ave., West Homestead, Pa. 14

Wanted—Second-hand squaring shear, 30 in., in perfect condition. State price and style. Address "W. D. Z.," Care of The American Artisan, 69 Dearborn St., Chicago. 14

For Sale—A set of tinner's tools, cheap; have been used but a short time. Were new when I bought them. L. J. Eneboe, Woonsocket, S. D. 14

For Sale—Complete set tinner's tools, machines and stakes as good as new, cheap. Address Louis Spengel, Highland, Ill. 14

HELP WANTED.

Wanted—Tinner, good steady man for all around work, call or address Boyd Bros., Glen Ellyn, Ill. 17

Manufacturer of tinware would like to engage commission salesman for Indiana, Illinois, Iowa and Ohio. Address "Box W. L.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Wanted—An experienced salesman visiting the hardware trade to handle a high grade furnace as a side line. Forest City Foundry & Mfg. Co., Cleveland, Ohio. 17

Wanted—One experienced wood carver on stove patterns; also to assist in pattern work. Please address, stating salary required, "Box C. P.," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Several salesmen wanted to represent a leading stove manufacturer, with large line, in Wisconsin, Michigan and Indiana. Apply, with age, experience and references, to "Wisconsin," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Wanted—A first-class traveling salesman to represent a prominent stove and range manufacturing concern, making a line with a long established reputation, for Nebraska and South Dakota. Also one for Colorado, Montana and Idaho. Address application to "Prominent," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Wanted—Steel range makers and mounters and stove plate moulders at Chicago Heights. Bonnet-Nance Stove Co. 16

Wanted—A steady man; tinner, plumber, steam fitter and cornice man; good wages and steady job for a good man. C. S. Barger, Albia, Ia. 16

Wanted—Three tinners and two cornice workers, at once, at good wages and union shop. Mason City Sheet Metal Works, Lock Box 505, Mason City, Iowa. 16

Wanted—Steady, sober tinner. To the right man employment at good wages by the year; one who has had experience in furnace work. W. E. Bennett, Fond du Lac, Wis. 16

Wanted—A practical tinner and hardware man, for good reasons out of employment, wants a job, or a chance to buy into a business, or to start for himself; anything to make some money and get it right. Address P. O. Box 7, Lytton, Iowa. 16

Steady employment for a satisfactory journeyman tinner. Address H. G. Cormick, Centralia, Ill. 15

Wanted—At once, two cornice men and tinners for steady job at best wages. E. H. Groves, Mattoon, Ill. 15

Wanted—Two tinners and furnace men wanted at once; good wages. Write us at once. Johnson Bros., Kewanee, Ill. 15

Wanted—Tinner or sheet metal worker; permanent position. In writing state experience and give references. E. E. Gould, Beaver Dam, Wis. 15

Wanted at Once—A good tinner who understands plumbing; must be sober and steady. Steady job and good wages. Newtson Bros., Fowler, Ind. 15

Wanted—A first-class competent and reliable hardware man. One acquainted with mining and milling supplies preferred. Applicants address "Michigan," Ishpeming, Mich. 15

Wanted—At once, a good sober all-around tinner; must be sober and a hustler; good wages and steady employment will be given to the right man. Address C. A. Wyckoff, Morrisonville, Ill. 15

Wanted—A tinner for general shop and outside work in tin line, a man who understands the business and willing to work, must be sober and steady; steady job; state wages wanted. Address P. O. Box 346, Runnells Bros., Sioux Falls, S. D. 15

Wanted—A steady, sober man who understands tinning, plumbing and heating; steady work to the right man; must give reference. Dawley Hdwe. & Furn. Co., Rocky Ford, Colo. 14

Wanted—At once, a competent tinner and furnace man; references as to ability, honesty and sobriety; good wages and permanent job to right man. Address Stewart Lumber Co., Dow City, Ia. 14

SITUATIONS WANTED.

Wanted—Situation as clerk, stockkeeper or bookkeeper, in a retail hardware store; have had ten years' experience; can furnish first-class recommendations. Address "Clerk," Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 17

Situation Wanted—By a good all round tinner in a country shop where I can have full charge of shop. I understand pump and pipe work, repairing of all kinds, roofing and spouting. I am single, age 26 years, strictly honest and sober. Prefer town of 1,500 to 2,000. W. W. Welton, Stoughton, Wis. 16

Situation Wanted—As a store or hardware salesman; have been in this business all my life; best of references furnished; 22 years old. J. R. G., Box 101, Monticello, Ind. 15

Wanted Situation—By an all around tinner at in and outside, furnaces and job work. Address "B. D.," 787 Madison St., Chicago, Ill. 15

Situation Wanted—A position as traveling salesman or resident agent by a man with practical experience of 18 years in the sheet metal, furnace, hardware and kindred lines. Address G. W. H., Care of The American Artisan, 69 Dearborn St., Chicago, Ill. 15

SPECIAL NOTICES.

FOR SALE—Chance Life Time
Profitable hardware business doing retail and wholesale trade. Stock $12,000 to $13,000; can be reduced in 30 days to $8,000. Located one of best towns central N. Y. State; population 45,000 and increasing. Liberal terms can be arranged on purchase. Investigation invited Address, Hardware Company, care The American Artisan, 69 Dearborn St., Chicago, Ill. 12

FOR SALE.

Hardware, plumbing and heating business in one of the best towns in Northern Illinois; doing a fine business; must sell in 30 days; terms reasonable. This is a chance of a life time, if you want a clean, up-to-date stock. Best of reasons for selling. Address "BOX M. S." care THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago. 16

WANTED

At once, first class furnace and boiler salesman; one who understands his business and is acquainted with the trade in Northern Illinois and Southern Wisconsin. Address

BOILERS,
Care of "The American Artisan,"
69 Dearborn street, Chicago, Ill.

Wanted For 1903

Two First Class Salesmen for Southern Territory. Must be experienced Salesmen of unquestioned ability to whom liberal salaries will be paid.

RATHBONE SARD & CO.,
AURORA, ILL.

TO THE PROGRESSIVE STEAM FITTER

A small outlay will bring in large returns by purchasing exclusive territory in which to handle the improved Regulating Radiator, for steam heating, covered by patents. All additional pieces required by the patent can be picked up and applied in any steam fitter's shop, to any good modern radiator. Heats quicker and better than the old style and heats just as you want it. Prices for territory very reasonable. The right for a good sized county, containing 100,000 inhabitants can be purchased for $100. Smaller or larger counties at corresponding prices. Apply to

AUGUSTUS EICHHORN
26 Essex Ave., - ORANGE, N. J.

WANTED AT ONCE!
25
STOVE MOULDERS.
Shop Runs Steady the Year Around.

THE PITTSBURGH STOVE & RANGE COMPANY,
Allegheny, Pa.

A Great Chnace
For Anyone Wishing to Add to Their Plant.

Brittan & Mathes Company having disposed of their lock factory at Pittsburgh, excepting the Wrought Padlock Plant which must be removed at once. The plant consists of dies, tools, patterns and partly-made material. This plant will be sold at a bargain either for cash, time or exchange.

ARTHUR BRITTAN & CO.,
154 LAKE STREET, 17 CHICAGO, ILL.

COMPLIMENTARY POSTAL ORDER BOOKS—Just the *article* for every jobber if he wishes to increase his country business.
Manufactured by
B. LOEWENBACH & SON, Milwaukee, Wis.
FRANK P. O'NEILL, GENERAL AGENT.
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because your competitor is getting more European business than you are as I can accept the agency for a few lines of American manufacture in British Isles and Continental Europe. Will give prompt attention to same. Can furnish references.

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Fruit can wrench & jar holder. Big success. Sell year round

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3107, 3109 Chestnut Street,
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U. S. A.
Send for Illustrated Catalogue.

WILKE
Porcelain and Crystal
REFRIGERATORS.
Oak or tile exterior lined with ⅛-inch plate glass.
BEST BY TEST.
Sold on exclusive agency basis.
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CORN CRIB HOLDS 400 BU.
Cheap, handy and economical. All dealers sell them. Write for prices. We manufacture Peerless Wire Fence, Lawn Fence Gates, etc.
THE DEMING FENCE WORKS
Cedar Rapids, Ia.

"ALUMININE"

The only fire-proof Aluminum finish for stoves. Can be used on all kinds of iron work.
Large Cans, (6 oz.) $2.00 per doz.

ALUMININE PAINT & POLISH CO.,
701 West Lake, CHICAGO.

The "Weber Junior" Pumper
Can also be used for other power purposes.

Is all complete, ready to attach to pump. Equals 30 men pumping water. Uses but little gasoline. Is shipped crated completely erected, all connections made. Easy to start, any one can operate it. Every one guaranteed. Other sizes up to 50 H. P. Send for catalog. Weber Gas & Gasoline Engine Co. P. O. Box 1115B Kansas City, Mo.

L. SHIREMAN,
Springfield, O., writes:
"I answered an advertisement I saw in THE AMERICAN ARTISAN and got a good job. I can't do without your paper."

If You Bought A Horse

You surely would not buy one like this.
Then why advertise your product with cuts that don't do your stoves justice.
LET US MAKE YOUR STOVE CUTS.
We have had an experience of 22 years.

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Engravers and Electrotypers.
2 to 10 E. Larned Street, DETROIT, MICH.

DIXON'S SILICIA GRAPHITE PAINT
FOR TIN OR SHINGLE ROOFS AND IRON WORK.
IT IS ABSOLUTELY WITHOUT AN EQUAL.
Tin roofs well painted have not required repainting for 10 to 15 years.
If you need any paint it will pay you to send for circular.
JOSEPH DIXON CRUCIBLE CO. Jersey City, N. J.

100
Tinners' Patterns

THE AMERICAN ARTISAN FULL SIZE PATTERNS

Comprise patterns for a full line of tinware, in numerous sizes, square and round elbows, cut-offs, etc. These full-size patterns, numbering upward 100, are printed on manilla paper, from which they are readily transferred to heavy sheets and cut out ready for use. The list contains the following patterns:

Tea Steeper
Two-pint Tea Pot
Three-pint Tea Pot
Four-pint Tea Pot
Five-pint Tea Pot
One-quart Coffee Pot
Two-quart Coffee Pot
Three-quart Coffee Pot
Four-quart Coffee Pot
Five-quart Coffee Pot
No. 1 Coffee Boiler.
No. 2 Coffee Boiler
No. 3 Coffee Boiler
Lamp Filler
One-pint Dipper
One-quart Dipper
Two-quart Dipper
Four-quart Flaring Pail
Six-quart Flaring Pail
Eight-quart Flaring Pail
Ten-quart Flaring Pail
Twelve-quart Flaring Pail
Fourteen-quart Flaring Pail
Ten-quart Dish Pan
Twelve-quart Dish Pan
Fourteen-quart Dish Pan
Sixteen-quart Dish Pan
Dinner Bucket
Five-inch T-Joint
Six-inch T-Joint
Eave Trough Mitre Joint
"Snap" 2-inch Conductor Elbow
Cullender
Two-inch Square Elbow
Two-and-a-half-inch Square Elbow
Three-and-a-half-inch Square Elbow
Four-and-a-half-inch Square Elbow
Five-and-a-half-inch Square Elbow
Six-and-a-half-inch Square Elbow
Seven-and-a-half-inch Square Elbow
One-pint Funnel
Two-pint Funnel
Three-pint Funnel
Four-pint Funnel
Small Milk Strainer
Large Milk Strainer
Ten-quart Milk Pail Breast
Fourteen-quart Milk Pail Breast
Two-inch Four-piece Round Elbow
Three-inch Four-Piece Round Elbow
Four-inch Four-Piece Round Elbow
Five-inch Four-Piece Round Elbow
Five-and-a-half-inch Round Elbow
Six-and-a-half-inch Round Elbow
Seven-and-a-half-inch Round Elbow
Small Grocers' Scoop
Medium Grocers' Scoop
Large Grocers' Scoop
Apple Corer
Oval Foot Bath
Oval Pudding Pan
Half-gallon Can Breast
One-gallon Can Breast
Two-gallon Can Breast
Three-gallon Can Breast
Half-pint Measure
One-pint Measure
One-quart Measure
Half-gallon Measure
One-pint Basin
Two-pint Basin
Three-pint Basin
Four-pint Pan
Six-quart Pan
Ten-quart Pan
Small Cake Pan
Medium Cake Pan
Large Cake Pan
Small Wash Basin
Large Wash Basin
Sprinkler Breast
Four-gallon Churn
Five-gallon Churn
Small Dust Pan
Large Dust Pan
Five Sizes Funnel Patterns
Oval Dinner Bucket
Rain Water Cut-off
No. 7 Boiler Cover
No. 8 Boiler Cover
No. 9 Boiler Cover
No. 7 Boiler Bottoms
No. 8 Boiler Bottoms
No. 9 Boiler Bottoms

THE AMERICAN ARTISAN **full size patterns are a great convenience, and in no other way can they be obtained at so small a cost. Price, sent postpaid for the**

FULL SET OF 100 PATTERNS $1.00.

DANIEL STERN,

69 Dearborn Street,
CHICAGO, ILL.

Roofing

Metal

Ceiling

When selecting a line of Metal Ceilings the agent should look to the construction. Construction means a great deal in metal ceilings as you depend upon the time it takes to apply the plates for your profit, and it will take you twice as long to erect a "CANTON" ceiling with bad joints CEILINGS, irregular poor beads and "Canton" alignment. Metal Ceilings have the distinct advantage of perfect construction which means they have all the good features. Write for our mammoth catalog F illustrating our large assortment of artistic classified designs.

METAL CANTON CEILINGS

Registers

Conductor

Eave Trough

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THE CANTON STEEL ROOFING CO.,
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CANTON, O.

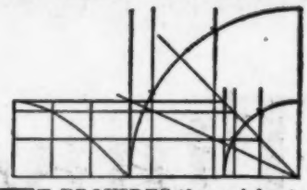
Gerock Bros. Mfg. Co.

1252 MANCHESTER AVE.,
ST. LOUIS, MO.

Zinc and Copper Ornaments. Steel Ceilings. Skylights and Ventilators.

Catalogue on application.

McFARLAND'S
Metal Workers Protractor Pattern



IT PROVIDES the quickest and easiest way known for laying out Pipe Elbows, Miters and similar work in Sheet Metal.

In accompanying illustration, the lines drawn from center cutting tangents to arcs and corresponding perpendiculars through their divisions at an equal distance from base line, show how the same pattern is produced from arc divisions of concentric circles.

Protractor Pattern of Aluminum from which any required angle for any pipe diameter can be marked out $5.00.

The same Protractor Pattern printed on suitably heavy card board $1.25.

Model sent free with circulars.

J. M. McFARLAND,
713 North Grand Ave., - LOS ANGELES, CAL.

Garry Iron and Steel Roofing Co.

Roll Roofing.
Corrugated Iron.
Metal Shingles.
Clap-boards.
Siding.
Steel Bricks.
Window Casings.
Fire-Proof Shutters.
Eave Trough.
Conductor Pipe.
Elbows.
Cornice.
Skylights.
Finials.

Cor. Coe and Lake Streets,
Cleveland, Ohio.

RUFUS SLOTHOWER, Shullsburg, Wis., writes: "I consider your manuals of inestimable value to the craft and no tinner can afford to be without The American Artisan."

The Model Stove Truck Is Out of Sight when Under a Stove.

IS ALL STEEL, HAS ONLY ONE ADJUSTMENT, IS PRACTICALLY INDESTRUCTIBLE.

We offer to take back and refund money, if after a month's trial, the MODEL is not satisfactory.

SEND FOR CIRCULAR AND PRICE.

THE S. M. HOWES COMPANY
BOSTON, MASS.

A GOOD THING TO GET AWAY FROM

Better get away from the idea that any old line of metal ceilings is good enough to handle.
Your customers appreciate the value of good goods.
If the line you handle is a poor one, they will sooner or later find it out, and you will lose a lot of desirable business.
As a matter of fact you can't afford to risk your reputation as an up-to-date dealer by tieing up to a back number line.
The right metal ceilings to handle are Berger's "Classik."
They are artistic and harmonious in design. They are deep stamped. They are easy to erect.
They combine the artistic effect of plastic relief with the mechanical excellence of sheet metal.
They form the most complete line of metal ceilings upon the market and have the greatest variety of patterns to choose from.
We want active, wide-awake dealers everywhere—they can make a big success handling Berger's "Classik."

BERGER'S "Classik" CEILINGS

BERGER'S Classik TRADE MARK METAL CEILINGS

back up the effort of the dealer and actually help him to get the business. Don't fail to write for new Catalogue and full particulars.

THE BERGER MFG. CO., Canton, Ohio.

New York Office: 210 E. 23 St., New York, N. Y. Philadelphia Office: 1218 Filbert St., Philadelphia, Pa.
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SPECIALTIES: Ceilings, Roofing, Siding, Eave Trough, Conductor, Hangers, Etc.

La Crosse Steel Roofing and Corrugating Co., La Crosse, Wis.

STEEL ROOFING

We are also manufacturers of
Eaves Trough
Conductor Pipe
Elbows Mitres
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All kinds. All gauges. Painted and Galvanized. Lowest Prices. Prompt shipments guaranteed. Send us your orders.

Art Metal Ceilings

For Interior Decorations.

Write for Catalogue and Prices.
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SPECIALTIES: Steel Ceiling, Zinc and Copper Ornaments, Statuary in Bronze, Zinc and Copper, Crestings, Finials, Capitals, Galvanized Steel Horses for Merry-go-Rounds, Copper Plated Ceilings in Antique Finish, etc., etc.

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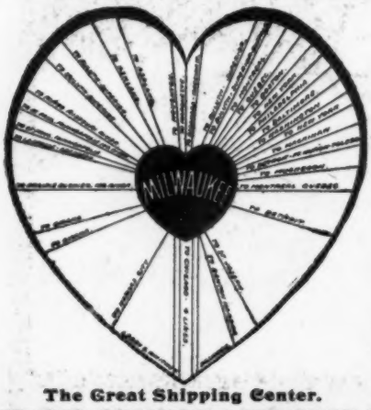
MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS.

MANUFACTURERS OF



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ROOFING		CORNICES		CEILINGS
	Eave Trough		Steel Roofing	
	Cond. Pipe		(all kinds)	
	(Rd. and Sq.)		Corrugated Iron	
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TINPLATE—GALVANIZED IRON—SOLDER.

WE ARE THE ONLY AUTHORIZED MANUFACTURERS OF CORRUGATED CUT-OFFS—(Beware of Infringement.

ROOFING PLATES. "JESSIE EXTRA COATED"

Bright Finish
Well Mottled

This plate has a n ce mottle finish on the bright order. It has fully 30 pounds of coating, and like all our plates is stamped and resquared, and made by the Palm Oil Process. It is worth all we ask.

We carry a large stock and can make immediate shipment.

ILLINOIS ROOFING & SUPPLY CO.,
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James Abbe & Son, Springfield, Mass., write: "Our foreman tells us it will do the work of six men; it pays for itself doubly on one job."

KENNEY'S DOUBLE SEAMER

FOR STANDING LOCK TIN ROOFING

Is the most complete Labor-Saving Double Seamer in the market. Send for catalogue.

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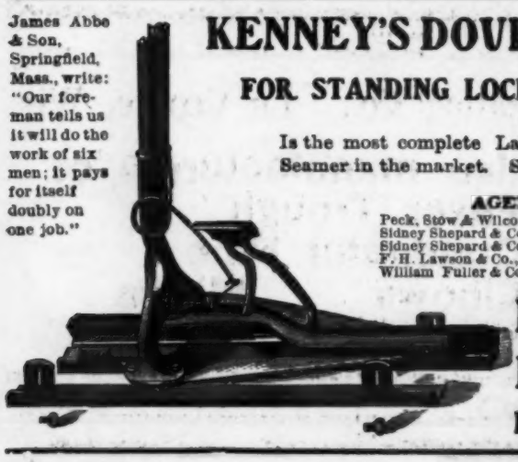

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IN THE INDIANA HIGHLANDS
Two Trains Daily, via Monon Route. City Ticket Office, 232 Clark St.

Pliability—ease of working and fitting around angles and corners—was one of the features of **MF** Roofing Tin that secured first prize for it at Paris last year. Next in value to the all-important question of a heavy tin coating, comes the ease of working—it saves waste of material and waste of time—makes *the roof that fits.*

MF ROOFING TIN

TRADE MF MARK

is the best roofing from every viewpoint. It is made by hand labor entirely. Every sheet must pass a rigid examination before it is boxed—and none but perfect plates are sold. Trade mark on every sheet. Ask your roofer for **MF** Roofing Tin, or write { W. C. CRONEMEYER, Agent, Carnegie Building, Pittsburg. for illustrated book on roofing.

AMERICAN TIN PLATE COMPANY,
New York.

Ask Your Jobber For

The Cyclone Snow Shovel

LIGHTEST, STRONGEST AND NEATEST

Everybody Needs It. All want it.

Write for Illustrated Circular of SNOW SHOVELS, FURNACE SCOOPS and other Seasonable Specialties

F. E. KOHLER & CO.,

The Hardware Specialties Manufacturers

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DURABLE BLACK ELASTIC · CARBONITE · ROOF & IRON PAINT

It Always Makes a "Hit"

The Forest City Paint & Varnish Co.

1182 HAMILTON STREET, CLEVELAND, O.

Has a Host of Friends

Therefor every dealer who wishes to please his customers should carry a line of the "Buckeye Brand" Decorative Home Paints. The long list of good points of this paint creates a a demand for it everywhere. Our book of Paint Points on application.

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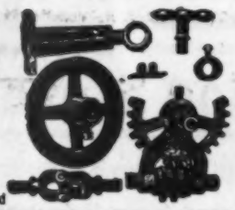

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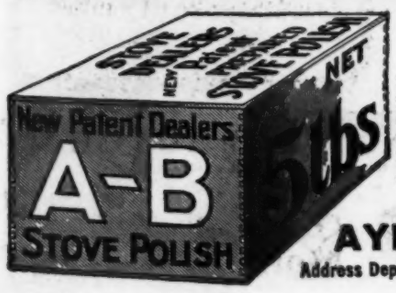

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This new patented prepared powdered stove polish mixes quick, shines easy, black, brilliant and is waterproof. No rust or dust. Cheapest and best polish ever invented. Keeps any length of time in any climate. You make your own paste at once. Investigate for fall trade. It willpay you.

AYLING BROTHERS

Address Dept. A, 8-14 HADDON AVENUE, CHICAGO, ILL.

SHORTEST AND FASTEST

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QUEEN & CRESCENT ROUTE.

. . . FROM . . .

CINCINNATI AND LOUISVILLE

TWO TRAINS A DAY AND 24-HOUR SCHEDULE

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NEW ORLEANS AND JACKSONVILLE

Through Pullman Drawing Room Sleepers, Cafe and Parlor Observation Cars.

89 Miles Shortest Route to New Orleans.

Write for Printed Matter and Rates.

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Skinner & Richards, Columbus, O., write:

"Please omit our ad for tinner as we have secured a man. We find THE AMERICAN ARTISAN to be a first-class medium for advertising in this line."

Don't Get Soaked

by buying inferior stove polish when the best polish the market affords is offered in **Black Silk Stove Polish,** which is quickly applied and invariably gives satisfaction. We are exclusive manufacturers.

Black Silk Stove Polish Works, Sterling, Ill.

LEWIS D. WYNN, Proprietor.

AD-EL-ITE SPECIALTIES ARE LEADERS AND MONEY MAKERS.

MAKE YOUR HOME attractive and beautiful by using

AD-EL-ITE TINTED ENAMELS

—weather and wear proof—

PERFECT DURABLE LUSTROUS Refinish your iron beds, walls, furniture and a thousand other articles at a trifling cost. Attractive advertising matter and signs. A good, live dealer wanted in every town. Further particulars free.

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We Can Ship Promptly

Repairs for all stoves made in New England. Western dealers should make a note of it

THE S. M. HOWES CO., Boston, Mass.

UNCLE SAM DAMPER! THE PIONEER STEEL DAMPER

FURNACE PIPE DAMPER.

The handle is enameled wood, will not heat, rigidly clamped and can not come off. The spring is not affected by heat. The stem is a steel rod, all one piece and nothing to fall apart; pointed and easily driven through the pipe. The Damper Plate is made of cold rolled pickeled steel, corrugated to stiffen it and prevent warping. We call special attention to lightness and strength of these Dampers and their desirability for FURNACE Pipes.

"The Difference in Weight Pays the Freight."

Ask Your Jobber for the "UNCLE SAM."

SAYRE STAMPING CO., Sole Manufacturers, SAYRE, PA.

U.S. INFALLIBLE METAL POLISH

IN PASTE, LIQUID OR POWDER

FOR ALL KINDS OF METALS

Best, Cheapest, Goes Farthest. Never dries up or shrinks. Money makers for everybody. Sold by the jobbing trade. Sample free by mail. Address,

GEO. W. HOFFMAN, Manufacturer

295 E. WASHINGTON ST., INDIANAPOLIS, IND.

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119 E. Madison Street, CHICAGO, ILL.
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Established 12 Years

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb., and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

BRIDGEPORT CRUCIBLE CO.

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Martin Timmer, Knox, No. Dak., writes:

"Please stop my 'ad' (situation wanted) in your paper, as I have had dozens of letters in reply and have found the position I wanted."

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.

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Clark, Quien & Morse, - Peoria, Ill.

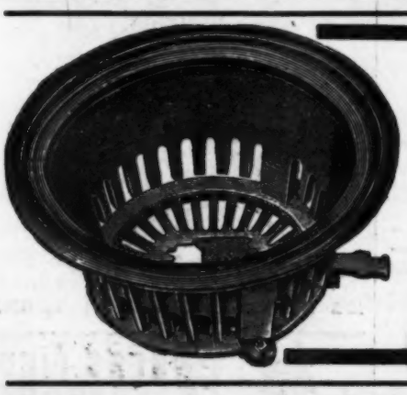
REPAIRS FOR ALL STOVES AND FURNACES

Stove Rods, Paste, Stove Putty.
Stove Knobs, Pipe Dampers, Mica, Etc.

Wm. T. Dust Co., Detroit.

REPAIRS FOR ALL STOVES AND RANGES,

A. G. BRAUER, 316-318 NORTH THIRD ST. ST. LOUIS MO.



M. Brucker,

Manufacturer and Jobber of

Stove and Range Repairs.

FOUNDRY, OFFICE AND WAREROOMS

325 to 331 North Lincoln St.,

CHICAGO.

DO YOU WANT

STOVES AND HEATERS

that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

The Gobeille Pattern Co.

CLEVELAND, OHIO.

The GEO. W. COPE
STOVE PATTERN WORKS
Randolph and Atwater Sts.
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PERFORATED METAL

THE ROBT. AITCHISON PERFORATED METAL CO.
303-305 DEARBORN STREET, CHICAGO, ILL.

THE YANKEE HOT AIR DAMPER

HOT AIR. (IMPROVED) SMOKE PIPE.

EXCELS IN EVERY WAY. It is offered the trade at a price below that at which they can make the goods themselves. No trouble to put it in or take it out of the pipes. It has no equal on the market as a

STIFF, QUICK-WORKING AND NEAT DAMPER.

It is impossible for this rod, when in position, to move either way.

It has enameled wood handle, which cannot come off. Washer and spring will not fall of. Rod is made of ¼-inch cold rolled steel and slips into damper very smoothly.

NO CHARGE TO DEALERS FOR SAMPLE.

THE S. M. HOWES CO., MANUFACTURERS, 40-46 UNION ST., **BOSTON, MASS.**

Sheet Steel
DRAFT REGISTER
With Screws Complete.

No Cotter Pins or Washers

Stock Sizes 2¾ to 5¼ Inches.

Send for price.

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MATTHEWS & WILLARD MFG. CO.

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Auditorium Bldg.
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Steel Stove Rings

WE MAKE THE BEST FINISHED NEATEST AND STRONGEST

Wrought Steel Stove Rings

THE LATEST AND THE BEST

WE STILL LEAD IN

SPUN URNS AND STOVE TRIMMINGS

BUT BE SURE TO SEE OUR RINGS BEFORE YOU BUY.

R. W. BROKOPP, Medford, Wis., writes:

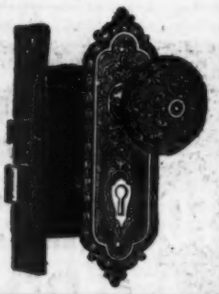
"I should not be without THE AMERICAN ARTISAN even if you asked twice the price."

THE TAYLOR & BOGGIS FOUNDRY CO.

CLEVELAND, OHIO.
MANUFACTURERS OF

LIGHT GRAY IRON CASTINGS

Builders' Hardware, Dampers and Damper Clips, Oil and Gas Stoves, Furnace Lamps, Molasses Gates, Letter Boxes, Hardware Specialties.



A full assortment of these goods for sale by all the leading Hardware and House-furnishing Stores.

(burned in the enamel) ARE SAFE

We claim Purity and Safety, and Substantiate this claim with Chemists' Certificates.

(Reduced fac-simile of label).

Look for this Label (Sustained by U.S. Circuit Court.) **Printed on BLUE PAPER and pasted on every Kitchen Utensil made in Genuine AGATE NICKEL-STEEL WARE as a guarantee of Absolute PURITY and SAFETY**

NAME OF UTENSIL.

NO. AGATE L MFG & Co. G NICKEL-STEEL-WARE

Patented Feb. 12, 1895.

COST	SELL

Analysis No. 72,339. New York, Dec. 7, 1896.

We have made a careful examination of a sample of "Agate Nickel Steel Ware" received from The Lalance & Grosjean Mfg. Co., Nov. 30, 1896.

The enamel coating is homogeneous, of extra thickness, and great purity.

It is *entirely free from arsenic, lead and antimony*—metals so often found in enameled goods.

Very respectfully,
STILLWELL & GLADDING,
Chemists to the New York Produce Exchange.

Pierre de P. Ricketts, E.M., Ph.D.
John H. Banks, E.M., Ph.D.

Analysis No. 14,180. New York, May 5, 1897.

LALANCE & GROSJEAN MFG. CO.:

GENTLEMEN—As requested by you, we purchased in the open market a sample of "Agate Nickel Steel Ware" and have made a careful chemical analysis of the enamel covering of the same.

We find this enamel is *absolutely pure and free from Arsenic, Antimony, Lead and other substances injurious to health.* We can therefore recommend it for all culinary and drinking purposes. Respectfully yours,

RICKETTS & BANKS,
Chemists to the N. Y. Metal Exchange.

Guaranteed Double Coated and Absolutely Pure
Copyrighted.

Read carefully the Chemists' Certificates.

Send for pamphlet soon to be issued. **Lalance & Grosjean Mfg. Co.**

NEW YORK BOSTON CHICAGO

J. M. LITCHFIELD

105 BEEKMAN ST., NEW YORK.

TINNERS FIND EMPLOYMENT

By advertising and using

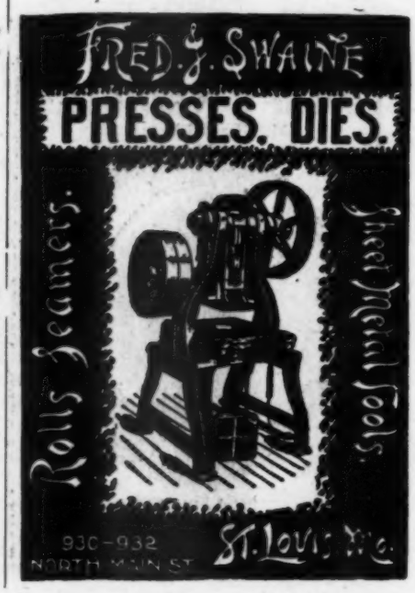
THE POWERS AUTOMATIC CHIMNEY TOPS.

They make chimneys draw, give tinners employment making stocks, and give the dealers profit.

Sold by Hardware Jobbers and Dealers
Made only by

POWERS BROS.
STREATOR, ILL.

This cut free to dealers.



Photographic Reproduction—Entire Equipment Made by Our Company, in Eight-Feet Sections.
Retail Room, 225 ft. Deep, 55 Ft. Wide 19 ft. Ceiling.

WARREN'S TIME-SAVING SHELVING—Make Your Goods Sell Themselves with Shelving that Doubles Your Popularity, Value of Clerks and Capital.

J. Q. Warren Mfg. Co.

COMBINATIONS TO SUIT ANY STORE, PERSON OR PURSE

Expert Designers of Hardware Shelving and Correct Arrangement of Stock

Manufacturers

Warren's Patent Glass Front Drawer Hardware Sectional Shelving

Catalogue Cabinets...Bolt and Screw Cases and Other Hardware Fixtures

MASONIC TEMPLE—Fifth Floor Offices and Display Rooms

CHICAGO, U. S. A.

"Yankee" Drills

Sold by Leading Jobbers. Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

RED HOT SELLER

GLOGAU'S Alcohol-Gas Stove.

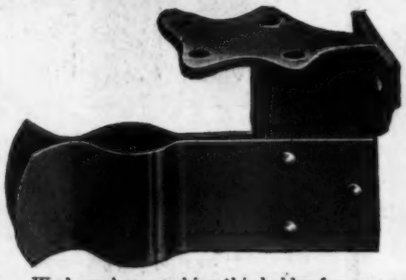
FAST SELLER wherever shown or exhibited. A boon for the Sick Room, Nursery, Camp, Light Housekeeping, Incubator, etc., or wherever gas is not available or desirable.

Makes its own gas; is portable; produces a lot of heat for little money. Consumes but 2 cents worth of alcohol in an hour; burns wickless; odorless. Cannot explode; can be upset without spilling the alcohol and never gets out of order. Weighs but 8 ozs.

For sale at your jobbers. Price to retailers, $8.00 dozen.

Sample sent postpaid on receipt of 70 cents, by

GLOGAU & CO.,
17 QUINCY ST. CHICAGO.
Sole Licensees for U. S., Canada and Mexico.



DIETZ "WARNER" HOLDER

We have been making this holder for many years, and know how good an article it is. We are sure that if attention is called to it, many sales will result.

The best place to carry a lantern on a wagon to light up the road at night is under the body of the vehicle.

The "Warner" Holder provides an easy and convenient attachment for carrying the lantern in that position.

The "Warner" Holder is screwed on the bottom of the wagon and always remains in place. Any ordinary Tubular Lamp or Dash Lamp can be instantly put in place by pushing the center tube between the spring jaws of the holder and will remain in position safely and securely. It will last a lifetime.

Order a sample lot from your jobber.

Ask us for our new catalogue (No. 35) Ask your jobber for prices.

R. E. DIETZ CO. 99 Laight St. Established 1840. New York

Elbert Stebbins
Dixon, Ill.
Writes:

"Allow me to express my opinion of THE AMERICAN ARTISAN.

I can honestly say that is the best paper printed on the subject.

I highly recommend it to all interested in general tinsmithing."

P. E. D. UNDERWOOD, Sullivan, Ill., writes:

'I value your paper very highly as authority on the subjects it treats."

HAVE YOU SEEN IT?

SELLS AT SIGHT.

Warren's Folding Interlocking Mica Chimney.

Patent Applied For.

Some Points of Superiority Over Other Mica Chimneys:

1. Transmits ten per cent more light.
2. Casts no Shadow.
3. Can be easily and satisfactorily cleaned.
4. Takes little room, a whole gross occupying less space than two dozen ordinary chimneys.
5. Shipping weight, one-fifth less.
6. In use, has fine look of a glass chimney.

Fig. 1

Fig. 2

Fig. 3

TO FORM CHIMNEY—Carefully roll the flat sheet, Fig. 1, bringing the metal strips AA together as shown in Fig. 2 then interlock them, completing cylinder, Fig. 3

TO CLEAN—Unlock and lay out flat, wipe carefully with a soft cloth, moistened with water or vinegar.

Order Sample Dozen, No. 38, 3 Piece 8 inch.

Sole Manufacturers

EUGENE MUNSELL & CO.

NEW YORK
218 Water St.

CHICAGO
117 Lake St.

"THE BEST" LIGHT

IS THE

LIGHT

OF ALL

LIGHTS

MADE IN ALL STYLES

Overhead and Underneath GENERATORS

Gravity and Air Pressure

Retail, $4.00 and Up

Catalogues and price lists on request.

THE

BEST LIGHT CO.

217 E. 5th St., - CANTON, OHIO.

Largest Gasoline Lamp Factory in the World.

"THE BEST" LIGHT

The NEW CENTURY

STOVE PIPE.

Patented June 3, 1902.

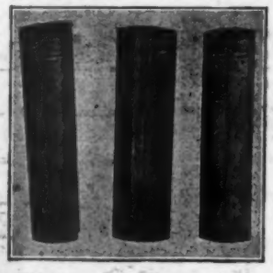


Fig. 1. Fig. 2. Fig. 3.

Fig. 1 shows the fold on the upper end of the pipe, to prevent same from slipping out of its fold; also shows how easily it can be taken apart and put together again.

Fig. 2 shows how nicely the pipe can be set together and nested for storing during the summer in a dry place to prevent rusting. Also makes it handy for shipping and moving from one place to another.

Fig. 3 shows the pipe when put together ready for use.

The New Century Stove Pipe is made up with the same fold as the hand made pipe with the exception of the patent hook between the crimp and beat, therefore can be cut to any length for fitting up stove pipes without spoiling the pipe like other patent stove pipes. Write for prices and sample orders.

A. CLAUSING & CO.

1089 THIRD STREET.

MILWAUKEE, WIS.

The Kees Corn Huskers

ARE THE BEST.

Ask your Jobber, or address the Manufacturer,

F. D. KEES, - Beatrice, Nebr.

Here is a Trade Maker and a Trade Keeper

A short reach, side cutting plyer. A very useful tool for electricians, jewelers and telephone or switchboard workers. If you need or your customers want plyers of any shape or size for any purpose, remember, gentlemen, we make them and you will find them illustrated in the new **GREEN BOOK** of Hardware Specialties. That's all

SMITH, HEMENWAY & CO., Manufacturers of Cutlery and Hardware Specialties, 296 Broadway, New York City.

UTICA DROP FORGE & TOOL CO., Manufacturers of NIPPERS AND PLYERS.

Ask your dealer for these goods.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS Sold by All Hardware Dealers

NEW BRITAIN, CONN.

The Enterprise Sausage Stuffer and Lard Press

Made in 8 Sizes and Styles. TINNED or Japanned.

Each Iron Cylinder is Bored True

so that when Stuffing all the material must pass through the Spout.

The Lips on the Tin Cylinder

in pressing lard, prevents burning of hands when the Cylinder is taken out for the purpose of removing Hot Cracklings.

The New Patented Spout

furnished with each Stuffer is Corrugated, which prevents air entering the Casing, thus assuring preservation of Sausages.

No. 25, $5.50.

Order from your Jobber. Send for Descriptive Catalogue

The Enterprise Mfg. Co. of Pa.

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Disston Hack Saws

SUPERIOR IN QUALITY AND FINISH.

No. 18 Improved Reversible Frame Hack Saw.

No. 4 Oval Back Adjustable Frame.

Keystone Flexible, Machine and Disston Hack Saw Blades.

These Blades have the proper temper for the work required of them. Practical tests have demonstrated that they will cut more metal and wear longer than any similar style of blade on the market.

Henry Disston & Sons, INC.

KEYSTONE SAW, TOOL, STEEL & FILE WORKS,
PHILADELPHIA, PENNA.

American Family Scale.

BEST IN THE WORLD.

It is made of STEEL, TIN or BRASS Scoop Top.

A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use, and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY

AMERICAN CUTLERY CO.
CHICAGO, ILLINOIS.

WILLIAMS & JOHNSON, Farmer City, Ill., write: ..... "Please take out our ad. for a tinner, as we are supplied. Have been literally snowed with replies and want the 'avalanche' stopped."

Buy of the Manufacturer ...

The Biggest Line in Chicago

Make 35 Styles of Boilers.

Full line of Dairy Flaring Covered and Galvanized Pails, Tea Kettles, Dinner Pails,

JAPANNED FIRE SHOVELS

and Cobbler's Outfits. Make money, get our Catalogue and PRICES.

M. Schrayer's Sons & Co.,

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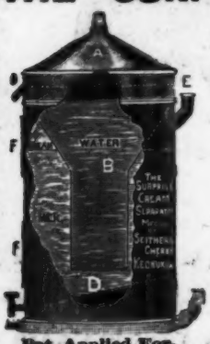
Do You Know

That the **O. K. WASHING MACHINE** is the best made, the lightest running and the most attractive washer on the market? *Are you selling it? If not, why?* Every first-class dealer should sell it, because it is made of the best materials, by the best mechanics that can be obtained, and every one sold will sell another.

Write us for Circulars and prices.

H. F. BRAMMER MFG. CO. Dept. B DAVENPORT, IOWA

THE SURPRISE CREAM SEPARATOR.



Pat. Applied For.

The milk is not mixed with the water. Skimmed milk not diluted with water is worth money to the farmer.

Write for prices and secure agency.

Every Separator Guaranteed.

Made of best heavy tinplate and is durable.

SEITHER & CHERRY CO.,

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The AEOLIPYLE

SAVES 25% IN COAL.

Increases heat. Keeps even temperature night and day.
Prevents escape of coal gas. Pays for itself every winter.

WRITE FOR ILLUSTRATED PAMPHLET.

The Aeolipyle Co., 237 Water St., N. Y.

Tel. 1875 JOHN. Liberal Discount to the Trade.

Lava Enameled Ware

is made from steel rolled especially for this purpose. It is covered with three coats of a very hard and elastic enamel, the surface of which is as smooth as the most delicate of china. The enamel is free from lead, antimony and arsenic.

Cleveland Stamping & Tool Co.

Cleveland, O.

JOS. P. BELL, Baraboo, Wis., Writes: "Please take my ad. out of your paper. If you don't I will have to hire a man to answer the letters I am receiving."

THERE ARE MANY SUCCESSFUL MEN

$6.00 NET.

having plenty of profitable work in hand. Are you one of them? How does the successful man do it? Study his methods. **You will find his way of doing things is up-to-date. His** tools are A No. 1, and his mechanics know how to use them. **You cannot afford to use a poor Fire Pot** or any other poor tool. Remember that time and gasoline cost money. A No. 1 Fire Pot will save you its cost in a short time in the saving of time and gasoline. **Your money back if you are not pleased.** Jobbers sell at factory prices, or we will ship direct upon receipt of $6.00. Our catalog is free.

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THE SANITARY... CREAM SEPARATOR

Constructed along approved lines. Most convenient for handling milk Summer and Winter. No skimming, lifting and washing of crocks.

Separates cream from milk without dilution or mixing of water or turning a crank.

Inner can detachable.

All separators fitted with our self sealing attachment and furnished with our sanitary faucet. Send for sample at once. A quick seller. Sold to one dealer in each town.

Write for prices and descriptive circulars to the

SANITARY CREAM SEPARATOR CO.

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Locations for Industries.

Manufacturing is rapidly developing along the lines of the Chicago, Milwaukee & St. Paul Railway. Industries on a large scale now extend to the Mississippi River with indications of reaching the Missouri. Machinery and all the higher classes of manufactured goods are now being exported from this business territory to all parts of the world.

The Chicago, Milwaukee & St. Paul Railway Company's 6,600 miles of railway, exclusive of second track, connecting track or sidings, traverses eight states, namely:

NORTH DAKOTA	MINNESOTA	NORTHERN MICHIGAN
SOUTH DAKOTA	IOWA	WISCONSIN
Express Passenger Trains, Fast Freight Trains Throughout.	MISSOURI	ILLINOIS

which comprise a territory full of natural resources and advantages. This railway is geographically well located in relation to the great markets and distributing centers. Beyond its lines is a vast and rapidly developing territory extending to the Pacific Coast.

The Company gives unremitting attention to the development of local traffic along its lines and, with this in view, seeks to increase the number of manufacturing plants on its system, either through their creation by local enterprise or the influx of manufacturers from the east. It has all its territory districted in relation to resources, adaptability and advantages for manufacturing. Specific information furnished manufacturers in regard to suitable locations. Address,

LUIS JACKSON,

Industrial Commissioner C., M. & St. P. R'y. 660 Old Colony Bldg., Chicago, Ill.

The Greatest Stove and Range Wagon Ever Built

Low down. Short Turn. Thousands in use. Ask for Catalogue and Prices.

SHIPMAN, BRADT & CO., DE KALB, ILL.

IT KILLS

KIRK GUN CO.'S NEW SINGLE GUN

MADE FROM THE FINEST MATERIALS BY THE BEST WORKMEN

No. 80—12 Gauge,	30-inch Barrel		$8 50
No. 81—16 "	30 "	"	8 50
No. 82—20 "	28 "	"	8 50

WITH EJECTOR

No. 85—12 Gauge,	30-inch Barrel		$9 50
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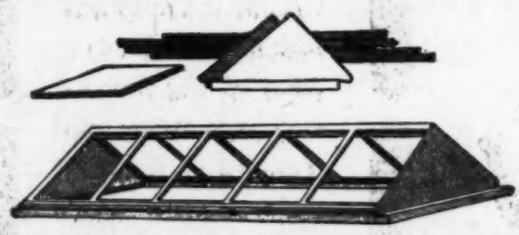
Special Terms to the Trade

FARWELL, OZMUN, KIRK & CO.
WHOLESALE HARDWARE, ST. PAUL

A METAL SKYLIGHT



THAT can be shipped *knocked down* and takes 4th class freight rate. Made any size, with plain ends or with louvre ventilators in ends. Guaranteed strong and storm proof. Can be set up by anybody without tools.

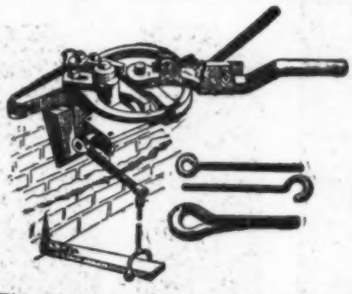
Send for description and prices.

GALESBURG CORNICE WORKS, Galesburg, Ill.

Jay Commons, Aurora, Mo., writes:—"Please take out my advertisement. It has been entirely satisfactory."

HAND EYE BENDER

Let your superintendent see this labor-saving tool.



With this hand-power tool you can easily and quickly form all kinds of hooks, eyes, U's, etc. Any blacksmith or helper can operate it.
We also have tools for bending angles and rings, as well as a lot of other money-saving specialties. Write for our catalogue.

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TOWER M'F'G. CO.
ELM & FRONT STS.
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BIG FOUR ROUTE

CHICAGO to INDIANAPOLIS, CINCINNATI, LOUISVILLE, THE SOUTH AND SOUTHEAST

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"Please drop my ad. for a tinner, I have secured the services of a good man, and have not time to answer all the applications."

"ROME"

NICKEL PLATED COPPER WARE

Tea Kettles, Range Kettles, Tea and Coffee Pots, Wash Boilers, Etc.

ROME MANUFACTURING COMPANY, ROME, N. Y.

WRITE US FOR PRICES. Address Department A.

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At Half Mast!

The right goods will bring most any business back to life. Quality is a foremost benefactor. Every piece of our Enameled Steel Ware and Tinware is stamped with our trade-mark. It infuses life. Write to nearest office for catalogues and prices.

NATIONAL ENAMELING & STAMPING CO.

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Standing Seam and Slate Roof
(PATENTED)

Snow Shoe Irons

No snow rails need be used unless desired. The lugs clinch through the seam easily but securely.

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Manufacturers of Tinners' Hardware and Roofers' Supplies. PHILADELPHIA, U. S. A.

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Steel wire springs instead of sheet iron stays.
Stays where you put it, and is absolutely soot and smoke proof.
Made either plain or decorated.
Send for miniature sample and prices.

Welling Manufacturing Co.,
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No More Smoky Chimneys

If they are mounted with the Iwan Revolving Chimney-Tops

Most practical, simplest to put up, most satisfactory

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SPERRY'S SUGAR KETTLES.

Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your Jobber for them or write us.

D. R. SPERRY & CO.,
HOLLOW-WARE FOUNDERS,
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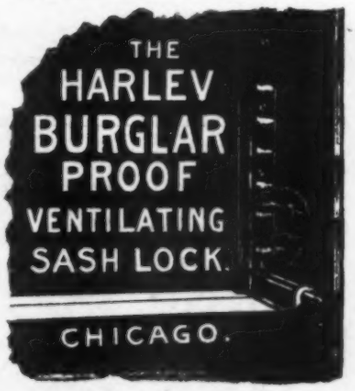

This Lock is always on guard.
You can't forget to lock it.
It locks itself.
Windows open for ventilation are still locked securely.
The Burglar's "Jimmy" can't force this Lock.
Better than a Policeman, in is there all the time.
It never sleeps. But you can.
Send for Catalogue.

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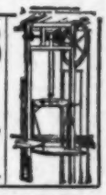

Improved, Quick and Easy Rising Steam and Hand Power.

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1061 9th St. Council Bluffs, Iowa
OMAHA BRANCH, 108-110-112 N. 11th St.

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On FIRST and THIRD TUESDAYS in each Month to **VIRGINIA**
Via NORFOLK & WESTERN RAILWAY
For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address
ALLEN HULL, D. P. Agt., Columbus, Ohio

Magic Pattern Rule

Will lay out patterns for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammell. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction. Price, complete in a nice wooden box with Chart. $4.00 net cash. (Mention THE AMERICAN ARTISAN.)

Lufkin Rule Co.,
Saginaw, Mich.

Don't Be Deceived but insist on

McClure's Genuine Charcoal Iron Redipped Roofing Tin.

McCLURE & CO.,
Manufacturers of Tin Plate.

PITTSBURGH, PA., 211, 213 & 215 Second Ave.
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THE "CENTENNIAL" Rain-Water Cut-Off

The strongest, most durable, and cheapest CUT-OFF on the market.

The only single Cut-Off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers. Patent applied for. Manufactured only by

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"PULLMAN" Sash Balances

Are you selling them?
In use Everywhere.
Look for the Metal Tapes in All New Buildings.
Folder No. 2 sent free.

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EXCELSIOR FOR PACKING PURPOSES

Ask for price F. O. B. Your station.

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648 & 650 W. 34th Street, NEW YORK CITY.

Crying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark;—you—know—what—you—are doing—but—nobody—else—does.

We Make a Specialty of

FURNACE MEN'S SUPPLIES

Heater Pipe Plates.

IC	20-26	20-28	20-29½	20-32½
IXL	20-28	20-29½	20-32½	20-39
IX	20-28	21-32½	20-39	.....

Asbestos Cement, Paper and Anchor Paste, Excelsior and Perfection Hot Air Pipe, Jack Chains, Pulleys, U. S. Dampers and Clips, Hot Air Registers, Ventilators and Face Plates.

THE J.M. & L.A. OSBORN COMPANY

Cleveland and Columbus, Ohio.

STEVENS

NEW MODEL POCKET RIFLE, No. 40

This is a handy little Rifle and very popular among vacationists. It has a detachable skeleton stock. Can be easily packed in a grip, and weighs, according to length of barrel, from 2 to 2¾ pounds. Chambered for 22 Long Rifle R. F., 25 Stevens R. F., and 32 Long R. F.

With	10-inch barrel		$ 9.25
"	12 "	"	10.00
"	15 "	"	11.25
"	18 "	"	12.50

Have a Leather Case with Shoulder Strap for this at $1.75.

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